

Commerce

Better Equipment for Southern Mills

SOUTHERN TEXTILE BULLETIN

VOLUME 26

CHARLOTTE, N. C., THURSDAY, MAY 22, 1924.

NUMBER 12

Leather Belts that are 25% better than the best belts of 10 to 20 years ago

That is a statement many old-time belt users may be skeptical of. Especially those who have Chicago Belting belts on their pulleys today that have lasted over 20 years so far—with the belts still running and apparently good for many years to come.

It would naturally be difficult for such men to see just how our leather belts could be improved that much.

But it is true nevertheless. Chicago Belting pre-tested Leather belts are approximately 25% better today than the best belts of 10 to 20 years ago.

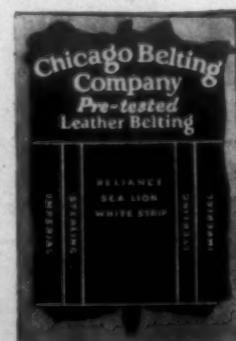
There are many reasons for this improvement. Our leather is better tanned for belting purposes—it is more pliable—has a higher adhesion to the pulley—has a greater average tensile strength—and has a better surface. The surface grips the pulley better—so that any Chicago Belting belt has an efficiency of 98.5% or better on any well designed drive.

But the principal reason for this improvement is covered by the one word "pre-tested." Pre-tested is a method—a method of manufacturing leather belts so that they are better than belts made by any other

method. It is based on scientific principles of leather belt manufacture and produces leather belting of known and guaranteed test ratings that can be recognized and checked by buyer and maker alike.

It enables the belting buyer to place his leather belt purchases on a more economical basis than ever before. It assures him of receiving the best possible values for his money—gives his plant better belts—and helps him to do his buying of belting more intelligently.

What Chicago Belting pre-tested leather belting is—what it means to the belting buyer and who makes it is the title of a little booklet that is just off of the press. A copy will be sent to you if you are a mill executive—or foreman. The demand for this booklet is very large so send in for your copy as soon as you can. They are free of charge—and free of obligation. And they describe a method that you will probably install after you have read the book. The largest consumers of belting in the world are already doing so.



Chicago Belting Company

NEW YORK BOSTON PITTSBURGH CLEVELAND MILWAUKEE ROCKFORD
Manufacturers of Leather Belting
115-125 NORTH GREEN STREET
CHICAGO, U.S.A.
NEW ORLEANS LOS ANGELES SAN FRANCISCO PORTLAND, ORE. SEATTLE, WASH. ATLANTA

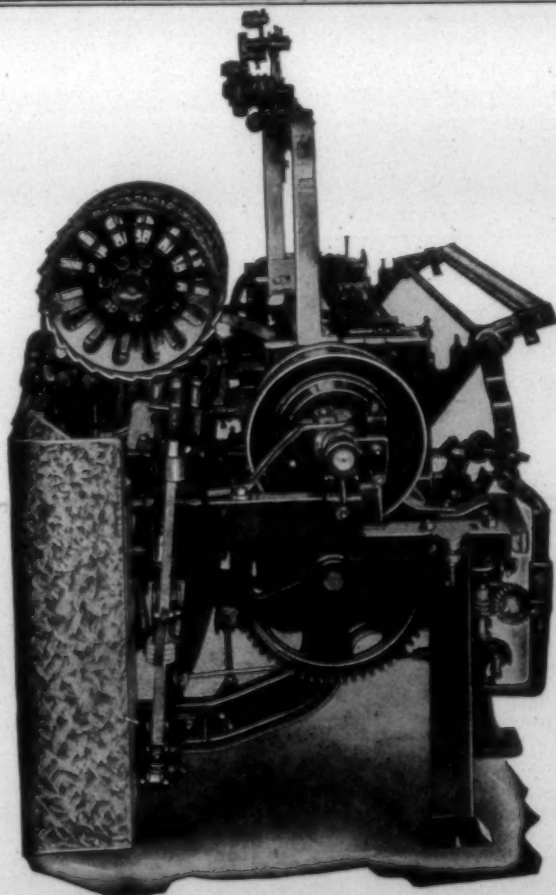
Chicago Belting

Card Clothing

made in the
SOUTH
equal to the
BEST

Charlotte Manufacturing Co.
CHARLOTTE, N. C.

End-View of our Nordray Loom With Lacey Top-Rig



We Build a Simple Automatic With Rugged Design

HOPEDALE MFG. COMPANY
Milford, Mass.

Southern Office

Greenville S. C.

WHITIN MACHINE WORKS

ESTABLISHED 1831
TEXTILE MACHINERY

Manufacturers of the following
Machines

COTTON MACHINES

Cleaning	Combing Machines
Opening	Drawing Frames
Conveying	Roving Frames
Distributing	Spinning Frames
Picking	Spoolers
Revolving Flat Cards	Twisters
Sliver Lap Machines	Reels
Ribbon Lap Machines	Quillers
Loom Dobbies	

COTTON WASTE MACHINES

Cotton and Woolen Systems

Openers	Revolving Flat Cards
Pickers	Derby Doublers
Willows	Roving Frames
Card Feeds	Spinning Frames
Full Roller Cards	Spoolers
Condensers	Twisters
Special Spinning Frames	

SILK MACHINES

Ring Twisters

WOOLEN MACHINES

Card Feeds	Condensers
Full Roller Cards	Wool Spinning Frames

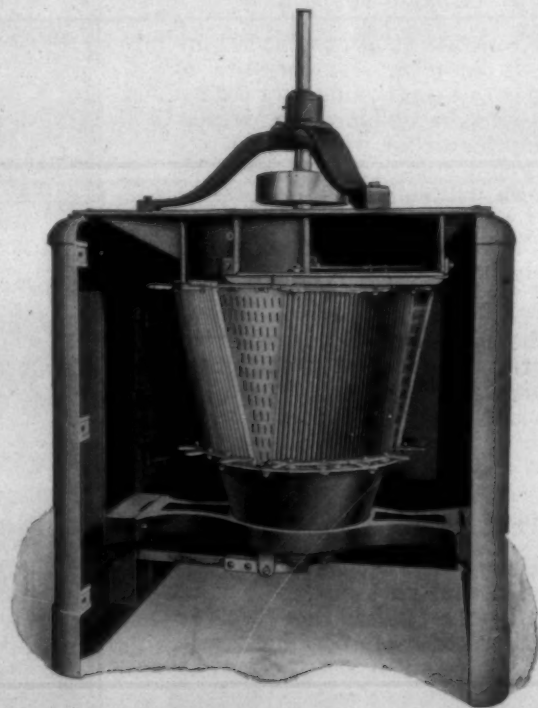
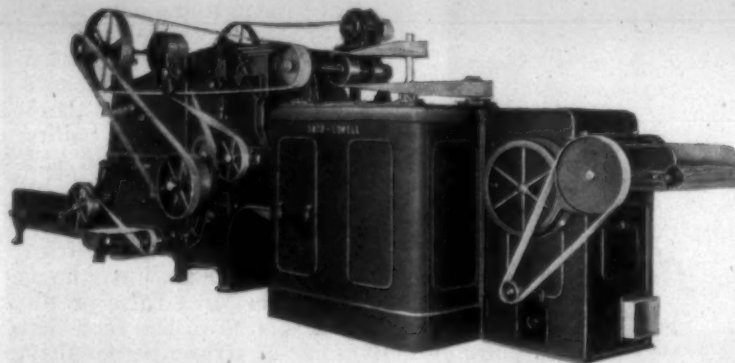
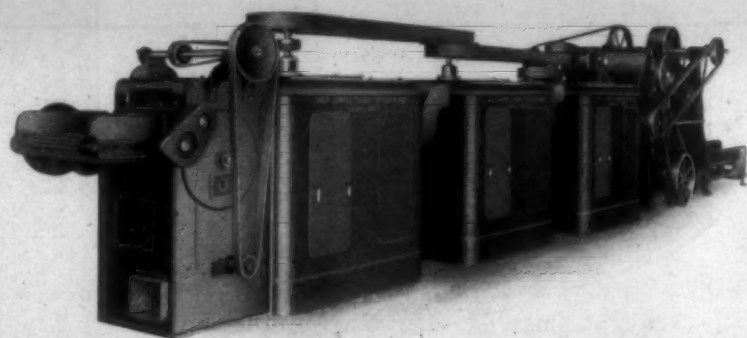
WORSTED MACHINES

Cone Roving Frames	Ring Twisters
--------------------	---------------

MAIN OFFICE AND WORKS
WHITINSVILLE, MASS. U.S.A.
SOUTHERN OFFICE CHARLOTTE, N.C.

SACO - LOWELL

Pioneer Builders of Vertical Openers and Bale Breakers in America



After building Vertical Openers for about twelve years, we now have approximately eleven hundred operating. They are being used to open and clean cotton of practically every length of staple.

Our first Vertical Opener was well received because of the many improvements we had made as compared to the original English built Creightons.

Naturally, on account of our success, other manufacturers have entered this field, but in the meantime we have gained much knowledge thru experience and have made many improvements on our original machines, some of which are protected by patents.

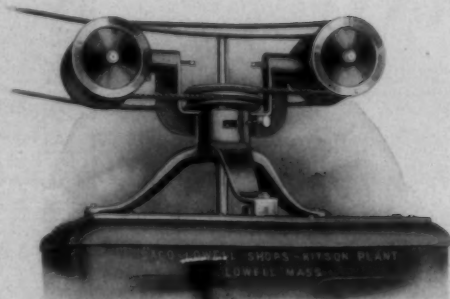
Note the Patented Adjustable Grid Bars illustrated here.

Simplicity in operation has been our slogan in all of our machinery.

We build the balanced rope drive, if anyone prefers this, but believe our improved belt drive is simpler to handle and more satisfactory. We are equipped to furnish stands for Vertical Motors if mill wishes this type of drive.

Note the sturdy simplicity of each machine in the Vertical Opener Bale Breaker Combination illustrated here.

Let our experience be of value to you and call for our sales engineer to discuss this equipment with you. Let him tell you the names of your neighboring mills that are already satisfied users of Saco-Lowell opening, cleaning, conveying and distributing equipment. Let our sales engineer show you how this equipment will pay for itself in a short time. He will give you Saco-Lowell's best advice, which is the culmination of one hundred years of experience in building Textile Machinery.



SACO-LOWELL SHOPS

1824

1924

Sales Offices

No. 1 Federal St.
BOSTON, MASS.

1220 Mint St.
CHARLOTTE, N. C.

Masonic Building
GREENVILLE, S. C.

HOUGHTON

IF THOMAS EDISON SAID:

IF Thomas Edison said that he had something in the way of an improvement in electrical apparatus; if Henry Ford claimed he had a better car; if John D. Rockefeller would declare he had a substitute for gasoline, the World would sit up and take notice, and the claims would be promptly investigated. And yet, not one of these eminent authorities has ever given as much study and attention to his respective profession and calling as has the HOUGHTON RESEARCH STAFF given to the study of the requirements of the Industries in Oils, Greases and Leathers.

As eminent as are these great authorities, there is not a single one of them, but who at times has made a blunder, or a false prophecy, which is, of course, due to the fact that they are all individuals of strong personality, acting as individuals in all their research endeavors, free to give public expression to any opinion they please. But the HOUGHTON RESEARCH STAFF has never yet made a real "bull." This is because the knowledge of the Houghton Research Staff is organizational and not individual, and there is no strong character who dominates the Staff to prejudice its deliberations, or final conclusions.

Therefore, when E. F. HOUGHTON & CO., the corporation in control of the HOUGHTON RESEARCH STAFF, its actions and products, makes a claim concerning an oil, grease or leather, for mill use, the claim comes from the highest known authority.

This is not an idle boast of the accomplishments of any one individual, or referring merely to the present, for the HOUGHTON RESEARCH STAFF is 58 years old and there is not a single one of its original members alive today. This is merely stating a fact concerning a recognized authority.

The HOUGHTON RESEARCH STAFF was the originator of petroleum steam en-

gine cylinder oils; E. F. Houghton & Co. was for four years the only marketer of such oils in the World. The HOUGHTON RESEARCH STAFF has studied steam engine lubricants and lubrication as it has studied no other subject. When, therefore, that authority states positively that, by the use of HOUGHTON'S CYL-TAL, the cost of the lubrication of steam engine valves and cylinders may be reduced 50%; the lubrication substantially improved; and all difficulty from oil in the boiler or exhaust steam eliminated, it is an authoritative statement, worthy of investigation.

If true, no mill can afford to use cylinder oil.

The truth may be ascertained by the simple method of trying a trial drum of CYL-TAL, on your own terms of approval.

CYL-TAL is a grease at atmospheric temperatures, but is an oil at temperature of service. In order to keep it fluid and feed it in drops, a special type of lubricator is necessary. That lubricator we will furnish free for test, and if you decide to adopt CYL-TAL after the test, we will sell the lubricator to you at cost. If the test is not satisfactory, you return CYL-TAL not used, lubricator and all, and send us a bill for the labor of putting on and taking off the lubricator.

This offer is being made generally to every steam user in the United States and other English-speaking nations, and we would not dare to run the risk of such an enormous loss as a large number of returns would cause, were the merits of CYL-TAL not certain.

The offer is made not because we believe in the merits of CYL-TAL, but because WE KNOW, and we know because we are experienced and skilled in this particular branch of the oil business—the lubrication of the valves and cylinders of reciprocating steam engines.

E. F. HOUGHTON & COMPANY

Works: Philadelphia—Chicago—Detroit

Distributors Located At

ATLANTA, GA.
1001 Healy Building
Phone: Walnut 4651

GREENSBORO, N. C.
P. O. Box 81
Phone: Greensboro 1990

GREENVILLE, S. C.
P. O. Box 1143
Phone: Greenville 2316

ST. LOUIS, MO.
418 N. Third St.
Phone: Olive 3559

AND IN EVERY OTHER TEXTILE MANUFACTURING CENTER OF THE WORLD

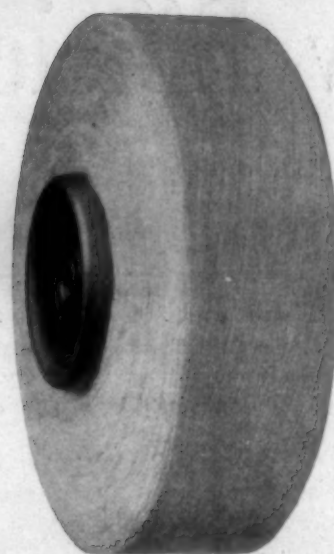
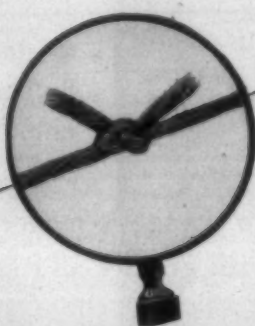
Oils and Leathers for the Textile Industry



AUTOMATIC SPOOLING

By the Barber-Colman Process
results in Better Yarn and
Greater Production at lower Cost.

*Every Knot a
Weaver's Knot*



High Speed Beam Warpers
High Speed Ball Warpers
Twisting Creels for Ply Yarns

Full Data Furnished on Request

BARBER-COLMAN COMPANY

Rockford, Illinois

Boston, Mass.

Greenville, S.C.

Your Profits Will Be Increased By Efficiently Opening Cotton

Every mill that has discarded the antiquated truck openers and adopted either the vertical type openers or the highly improved horizontal opener of comparatively recent introduction, will testify to the tangible gains in profits and quality, through the efficiency of these machines, in opening and cleaning cotton.

With the improved, modern opening machinery high quality yarns can be made with low grade cotton. Opening machinery of the most modern types not only opens the cotton to the fluffiest possible condition, but takes out so much dirt and trash that a single section picker will usually do the work that a double section picker does where old style openers are used; **saving one picker operation, labor expense and machinery investment.**

These modern opening machines eliminate "kinky" cotton, produce more uniform lap, accelerate production and improve the quality of the finished product.

The sage advice of cotton research specialists today is: to replace antiquated opening machinery with modern types. It is because of the use of vertical type opening machinery that British mills are enabled to turn out superior products from low grade cotton. These openers, running at decreased speed, open the cotton to fullest fluffiness and extract an almost incredible amount of dirt.

NOW is the advantageous time to change to modern types of opening. You can install new opening machinery NOW with greater all-round profit than ever before.

Every move you make to increase the standard of quality in your mill adds strength to the South's textile supremacy, and will return to you a twofold reward in decreased profit leakage and increased quality.

*Keep The South Leading in Big Scale
Production to Quality Textiles*

Think More About Improved Opening Machinery—Think NOW

Better Equipment Campaign

This advertisement contributed to by the following firms:

Saco-Lowell Shops
Whitin Machine Works
H. & B. American Machine Co.
Fales & Jenks Machine Co.
Woonsocket Machine & Press Co.
Whitinsville Spinning Ring Co.
Crompton & Knowles Loom Works
Lestershire Spool & Mfg. Co.

Easton & Burnham Machine Co.
Ashworth Bros., Inc.
Terrell Machine Co.
U. S. Bobbin & Shuttle Co.
Brown-St. Onge Co.
John Hetherington & Sons, Ltd.
Textile Mill Supply Co.
Charlotte Mfg. Co.

Howard Bros. Mfg. Co.
B. S. Roy & Son Co.
Hopedale Mfg. Co.
Carrier Engineering Corp.
Barber-Colman Co.
The Root Co.
R. I. Warp Stop Equipment Co.
Hyatt Roller Bearing Co.

The Bahnsen Co.
Cooper-Hewitt Electric Co.
Parks-Cramer Co.
Steel Heddle Mfg. Co.
H. W. Butterworth & Sons Co.
Fafnir Bearing Co.
Franklin Process Co.
T. C. Entwistle Co.

SOUTHERN TEXTILE BULLETIN

PUBLISHED EVERY THURSDAY BY CLARK PUBLISHING COMPANY, 39-41 S. CHURCH STREET, CHARLOTTE, N. C. SUBSCRIPTION \$2.00 PER YEAR IN ADVANCE. ENTERED AS SECOND CLASS MAIL MATTER MARCH 2, 1911, AT POSTOFFICE, CHARLOTTE, N. C., UNDER ACT OF CONGRESS, MAR. 3, 1879.

VOLUME 26

CHARLOTTE, N. C., THURSDAY, MAY 22, 1924.

NUMBER 12

Improved Opening Machinery

By a Representative of the Saco-Lowell Shops.

ENGLISH cotton mills have always paid a great deal more attention to their opening and cleaning equipment than American mills. On account of watching this department carefully, and with their more improved opening machines, they are able to buy lower grades of cotton for a higher class yarn or cloth than the average American mills.

The Creighton opener was first built about sixty years ago. This machine was very popular, but its popularity was enjoyed only for short period because of many inherent mechanical defects; improper bearings, and also lack of proper machinery for feeding.

The vertical position of the cylinder made necessary the use of a step bearing to support the heavy cylinder. It usually consisted of a hardened steel plug in the base, a similar plug set in the end of the cylinder shaft and a double convex washer of hardened steel between. As it was located in the center of the machine, it was directly in the path of sand and lint falling from the working chamber, and could neither be reached nor seen while the machine was running. In order to protect it from sand and keep it cool, it was encased in a water jacket, fed from a reservoir at one corner of the machine. An oil reservoir was also provided to lubricate it. This bearing was a constant source of trouble, and frequently became hot enough to cause fires, which spread to the machines following or to the bins of open cotton. This machine soon came to be regarded as too great a fire hazard, and mill men believed that the opening and cleaning advantages of this machine were not sufficient to more than balance this fire hazard.

About twelve or thirteen years ago, one of the largest American manufacturers of cotton mill machinery, realized the importance of this machine as an opening and a cleaning machine, and after many months of experiments adopted an entirely new kind of bearing, which overcame all the old bearing defects, removing completely the fire hazard. They also designed a new type of drive to take the place of the original balance rope drive, which was a considerable trouble to mills, due to

frequent breakages, and then the machine became popular with American mills.

There are probably in use in American mills now, twelve hundred Vertical or Creighton openers, but there are still today many mills that do not have this opening and cleaning and cleaning equipment, and they should investigate its advantages.

Vertical openers are now being installed in certain American mills in tandem. Some mills have cotton passing through two vertical openers and some three. In cases where cotton passes through two or three vertical openers, the first machine successfully takes out the heavy sand and second machine takes out as much in quantity, but about half as much in weight as the first. The second machine begins to take out large pieces of leaf, and considerably raises the grade of cotton. Where a third machine is used, it out about half as much in weight as the second machine, but this third machine's droppings consists largely of leaf. It is clear to the practical mill man that this leaf and sand is removed at this stage in the process of cotton yarn manufacturing, that the leaf will not be pulverized in the picker, and be in such condition that it is almost impossible for the cards or the latter machinery to remove these fine specks. Many mills state that their cotton is raised at least one grade by passing through Vertical openers.

Vertical openers do not injure the staple of cotton, whether it be short cotton or long staple cotton. We believe that the manufacture of the Vertical opener, with its mechanical improvements, has been one of the greatest forward steps toward the betterment of cotton mill equipment.

In connection with the openers, it was necessary to develop a better method of feeding this equipment than was formerly known. The light feeders which we use to feed breaker pickers were too light to successfully handle tightly compressed bales, without a previous opening. Statistics show that extra hard compressed American bales, which averaged 23 pounds per cubic foot before the war, are now compressed to approximately 35 pounds

per cubic foot. Experience has proved that it is more practical to open gradually by using a series of machines, arranged to work automatically with each other, than to open it completely on one machine. This is done to eliminate injury to the weaker fibers and to automatically deliver cotton from the bale to the picker room in a clean, well opened fluffy condition.

The modern bale breaker which is built to feed one, two or three vertical openers, is equipped with a long feed apron, so that the mill can mix a number of bales right on the bale breaker apron. This bale breaker is so equipped that regardless of the amount of cotton on the apron, a regular amount is fed to the opening equipment.

Every practical mill man has known for years the value of ageing cotton by piling up layers from various bales by hand, to allow the fibers of cotton to gradually open and straighten out through the absorption of moisture from the air. This process was slow, and required a large amount of space and hand labor. The modern bale breaker was designed to automatically, with the cheapest labor cost possible, take the place of this old method, as the machine is so arranged that layers from compressed bales can be fed directly into the opening equipment by a bale breaker.

We do not think that too much stress can be laid upon proper opening and cleaning equipment.

We do not think that too much stress can be laid upon proper opening and cleaning equipment.

Every mill does not need the same equipment, but any mill that does not have one of these modern systems of opening and cleaning certainly has need of it.

Conveying Equipment.

The modern spinning mill now has an opening room adjacent to the cotton warehouses. The opening equipment delivers the opened cotton to a galvanized iron pipe line. The cotton is conveyed through this pipe line to the picker room by the use of an exhaust fan and condenser. No cotton should pass through the fan on account of the great fire hazard. Therefore the cotton now is not blown to the picker room but

sucked to the picker room. Conveying systems properly fed give no trouble and save all the labor that would be required to truck cotton from the warehouse to the mill.

The cost of an opening, cleaning and conveying system for a production of about 10,000 pounds in ten hours would be approximately \$4,000. This system would easily eliminate the services of one man. Figuring his services at \$900 per year, a mill would then save \$900 annually on a \$4,000 investment. Such savings as these are always interesting to a progressive manufacturer.

Automatic Distributor.

The essential requirement of a picker lap is its evenness of weight, which depends largely upon the regularity with which the stock is delivered from the automatic feeder. To obtain a regular feed, stock in hoppers must be maintained at a uniform level.

Feeding by hand requires constant attention and an immense amount of hand labor. The Morton automatic distributor provides a regular, constant feed without attention. Cotton is dropped from a condenser on to an endless belt automatically delivering it to any number of hoppers. Proper adjustments are provided for regulating the amount of cotton to be fed to each hopper, resulting in an even weight of laps and a uniformity of blend and mixing of the cotton.

The cost of a distributor equipment for four breaker pickers installed is about \$1,600. By this \$1,600 investment, a mill should be able to eliminate one man. Again a labor saving of \$900 can be made on a \$1,600 investment and still improve the quality of work.

Picking Equipment.

The new features of pickers are largely refinements of the principles of the original lappers.

The lapper has two distinct functions, the removal of dirt and the forming of stock into a roll or lap. The first is accomplished by the beater and cleaning grids, the latter by the united action of the fan, screens and calender rolls. Inferior laps mean inferior work on the cards and subsequent processes, therefore today the picker room is

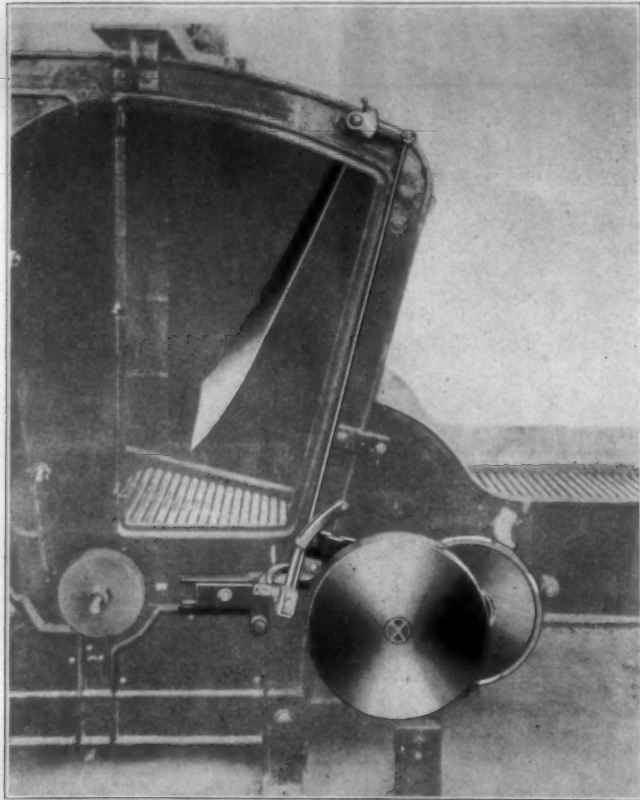
(Continued on Page 31)

Improved Opening Machinery

THE various machines that are made by the H. & B. American Machine Company, Pawtucket, R. I., for the better opening of cotton are described in the following article. The information concerning these machines is supplied by a representative of this company.

Automatic Regulator for Hopper Bale Opener.

Their patented automatic regulator for the hopper bale opener is



H. & B. Patent Automatic Regulator for Hopper Bale Opener.

designed to stop and start the feeding apron as the machine requires it, so as to keep a uniform height of cotton on the hopper at all times. This regulator is made to insure a steady and even feed, thorough and

even opening and to prevent choking. The makers recommend a long feeding apron at the back of this machine so that the operator can deposit layers of cotton from several different bales of cotton at one time, in this way providing for a good mixing of the stock.

Crighton Opener.

The Crighton Opener has been in long and successful use in England

cotton. Another advantage of this machine is that it can be adapted for use in almost any combination of opening equipment.

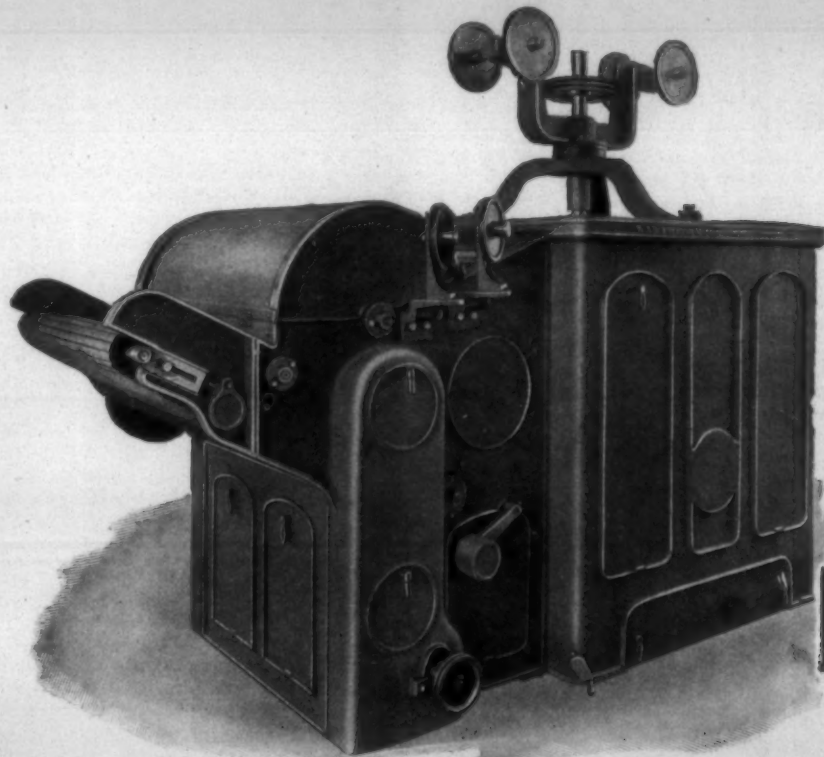
English Cleaning Trunk.

The English Cleaning Trunk is manufactured in sections, these coming in four-foot lengths and being supported by stands on the floor. It is common practice to couple several of these sections together. In operation, the cotton is drawn over vertical sheet iron plates and grids and a considerable amount of dust

Buckley Opener.

The term "Buckley" has been in use in this country for many years and, as generally understood, has referred to the type of beater rather than to a complete machine unit.

The original Buckley Opener was the outgrowth of the Willow, the most essential feature of which was the large cleaning area obtained by the upward stroke of the beater. Continued experiments and improvements have greatly increased the efficiency of this machine. It is

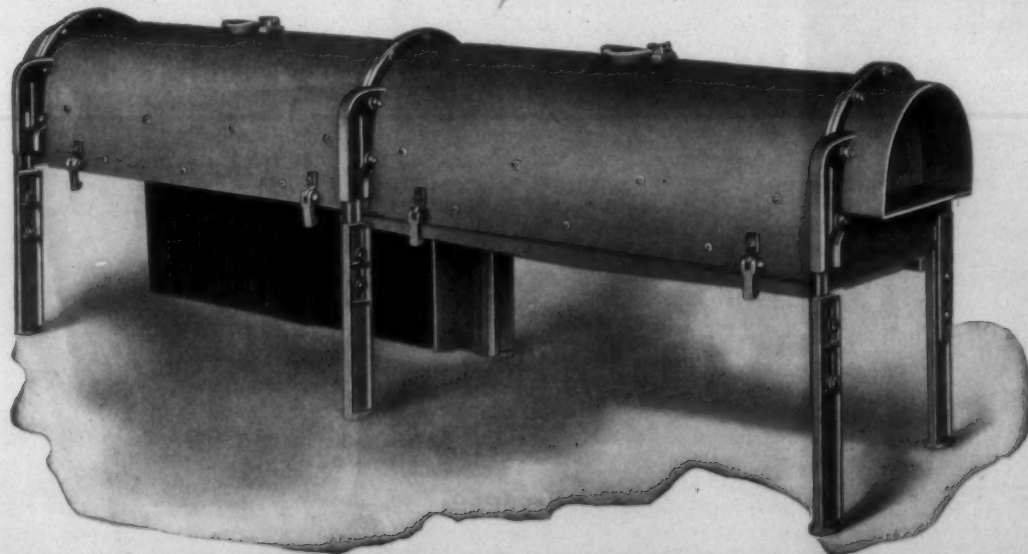


H. & B. Crighton Opener.

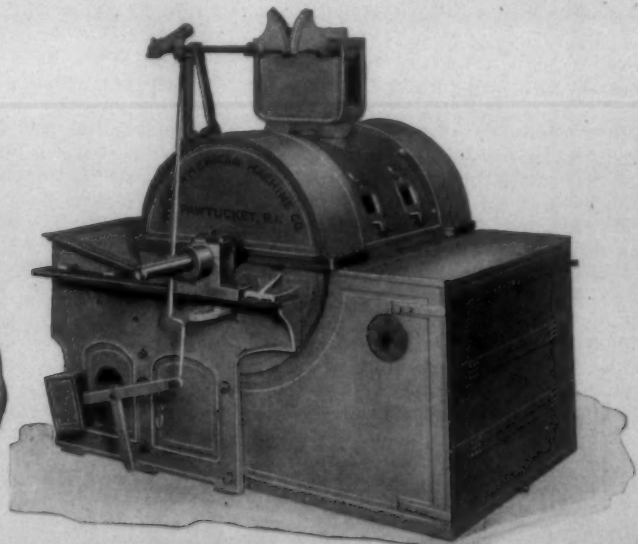
leaf, trash and seeds is shaken out and deposited in the spaces between the vertical grids. This machine can be cleaned by dropping doors which cover the entire bottom of the trunk and carry the grids.

now universally used in England on both medium and long staple cottons.

The H. & B. American Machine Company has recently brought out (Continued on Page 16)



H. & B. English Cleaning Trunk.



H. & B. Exhaust Opener.

WHERE fine textiles are colored;
where uniformity of product is
required; where the utmost in labor-
atory and practical dyeing service is
appreciated; the textile dyer prefers

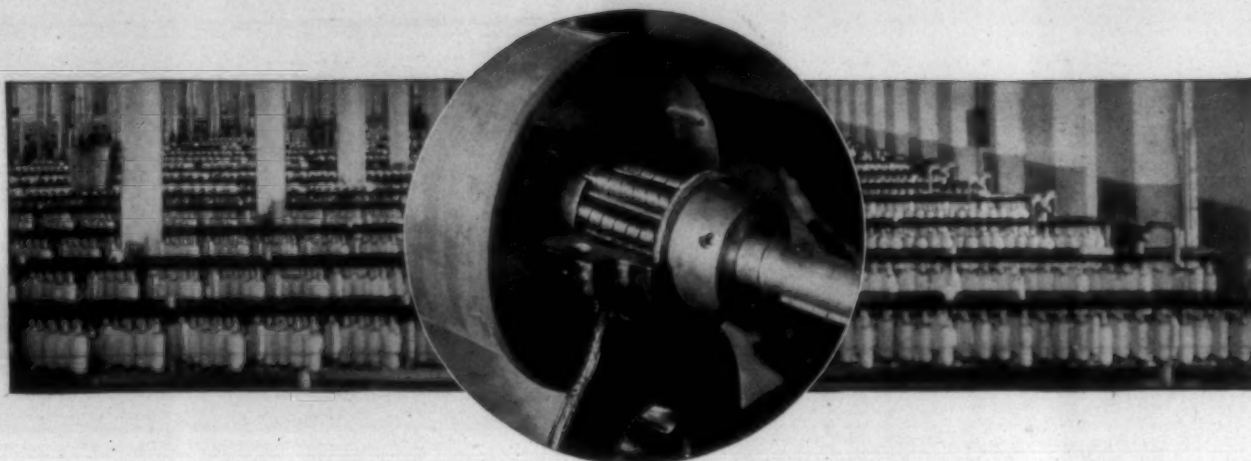
NATIONAL DYES



National Aniline & Chemical Company, Inc.

40 Rector Street, New York, N.Y.

Boston	Philadelphia	San Francisco
Providence	Chicago	Montreal
Hartford	Charlotte	Toronto



The Dollar Value Of Saving 1/2 H.P. per Frame

A Southern Mill (20,000 spindles) spends \$9,825.00 each year on power for spinning alone as follows:

No. of 252 Spindle Frames		Average H.P. each (tape drive)	Total H.P.	Average Cost per H.P. year	Annual Power Bill
80	x	4.91	= 393	@ \$25.00	= \$9,825.00

Based on repeated mill tests, a saving of \$1,020.00 would result with Hyatt bearings on cylinder shaft only, thus:

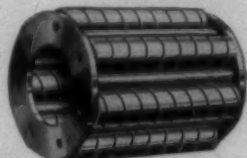
No. of Frames		Average Saving H.P.—per Frame	Total H.P. Saved	Average Cost per H.P. year	Annual Power Saving
80	x	.51	= 40.8	@ \$25.00	= \$1,020.00

If Hyatt bearings had originally been specified on the cylinder shafts at \$35.00 extra per frame, the total additional cost would have been \$2800.00.

$$\text{Investment Value} = \frac{\text{Annual Saving}}{\text{Total Cost}} = \frac{\$1020}{\$2800} = 36\%$$

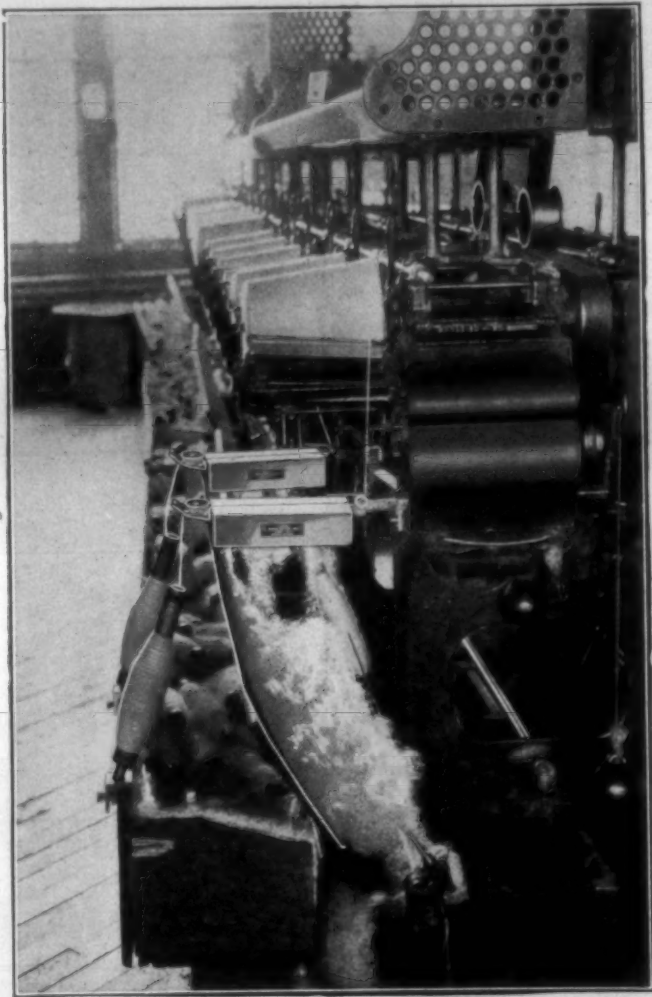
In the East power costs are higher, making this return proportionately larger. And throughout the country the trend is decidedly upward.

By specifying Hyatt roller bearings you can secure this power saving, together with the additional advantages of lower maintenance costs and dependable operation.



HYATT ROLLER BEARING COMPANY

NEWARK DETROIT CHICAGO SAN FRANCISCO
HUNTINGTON PHILADELPHIA PITTSBURGH MINNEAPOLIS
WORCESTER BUFFALO CLEVELAND MILWAUKEE



Mr. Knitter—Do You Realize Your Loss From Waste?

How often do your knitting machines stop because of slubs—heavy and light spots in the yarn?

Do you know the loss of production from this cause? Do you know the amount in dollars and cents—that is, lost in waste that is thrown under the cutter's table due to cutting out holes through the use of imperfect yarn?

Do you realize the difference in production between running good yarn and bad yarn? With labor high, even the same percentage of waste in manufacturing becomes a heavier charge against your costs. Are you taking the best means of meeting this situation?

The successful men in the production of knitted textiles are those who, under the pressure of high prices, make use of the most effective methods of avoiding waste in manufacturing operations.

A Knitter can cut down waste in his plant and increase his production by using the best grade of yarn—that is, free as possible from imperfections. If a lower grade contains even one more imperfection to the mile of 30/1, it means fourteen more imperfections to the pound—fourteen thousand more imperfections to the thousand pounds; one thousand pounds is a small quantity to the user of yarn. Fourteen more imperfections is a severe handicap in the manufacture of any product.

You can positively cut down the waste in production by equipping your winder with the Eclipse Yarn Cleaning Device. By using this cleaner, any grade of carded yarn can be made a ninety per cent better knitting yarn. You cannot appreciate this fact until after you have used the Eclipse Yarn Cleaner.

If you knit direct from cones, take this vital matter up with your "Spinner"—he can deliver you a better yarn.

Ask us to send you full information—or better still—we will send our representative to give you an actual demonstration upon your request. When you write, please mention the type of winder or spooler you use.

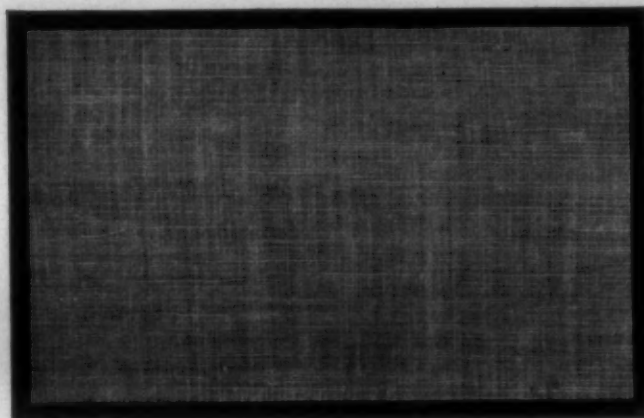
Eclipse Textile Devices, Inc. Elmira, N. Y.

Makers of

Automatic Yarn Cleaner, Automatic Stop Motion, Yarn Tension Device
Eclipse Van Ness Dyeing Machine

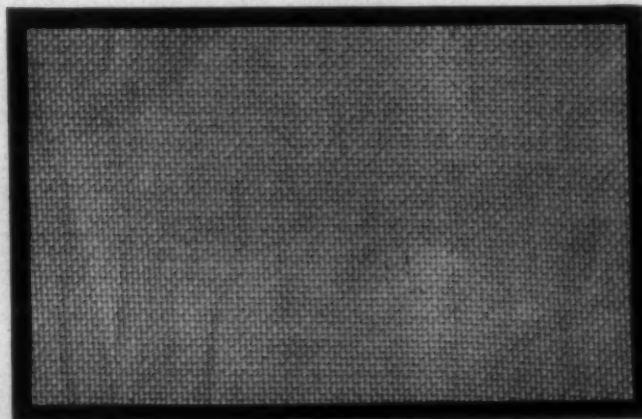
Imported Cotton Cloths

From Survey of United States Tariff Commission.



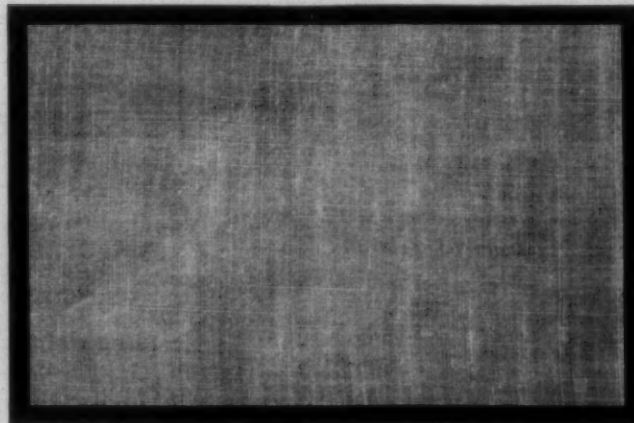
Sample No. 16.—Grey Cambric.

Plain woven. Grey width, 52½ inches.
93 ends and 83 picks per square inch, in the grey.
Warp yarn, 54s. Filling yarn, 64s.
Weight, 5.22 linear yards (7.61 square yards) per pound,
in the grey.
Unbleached.



Sample No. 17.—Matte Shirting

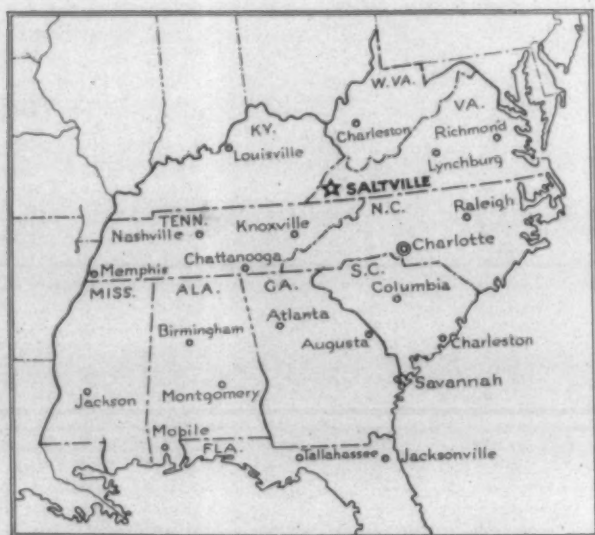
Plain basket weave. Finished width, 36 inches.
132 ends and 60 picks per square inch, finished.
Warp yarn, 84/2. Filling yarn, 41/2.
Weight, 3.72 linear yards (3.72 square yards) per pound,
finished.
Bleached and mercerized.



Sample No. 18.—Cambric.

Plain woven. Finished width, 36 inches.
95 ends and 68 picks per square inch, finished.
Warp yarn, 66s. Filling yarn, 69s.
Weight, 9.14 linear yards (9.14 square yards) per pound,
finished.
Bleached.

MATHIESON Chemicals



Saltville is located on the Norfolk & Western Railway, 37 miles from the line of the Southern Railway at Bristol, Va.-Tenn.

For all points in the South, freight differentials are overwhelmingly in our favor over any other plant manufacturing soda products.

A Southern Institution

TWO great factors in the rapid growth of the Textile Industry in the South have been favorable labor conditions and nearby sources of raw materials.

The only plant in the South manufacturing Soda products, our works at Saltville, Va., is the logical source of supply for Southern Textile Mills and may truly be called a Southern institution. During the twenty-nine years of its existence, this plant has saved Southern consumers millions of dollars in freight charges.

Let us serve you direct from the works in either carload or less-than-carload quantities.

The **MATHIESON ALKALI WORKS Inc.**
25 WEST 43rd STREET NEW YORK CITY

PHILADELPHIA
PROVIDENCE

CHICAGO
CHARLOTTE

Deal Direct with the Manufacturer

*Bicarbonate of Soda
Liquid Chlorine-Caustic Soda*



*Sesquicarbonate of Soda
Bleaching Powder-Soda Ash*



Mayview Manor

Blowing Rock, N. C.

"In The Heart of America's Alps"

SEASON FROM MAY 20th to NOVEMBER 1st

The Highest Point on the
Blowing Rock Plateau

At 4,500 elevation Mayview Manor commands sweeping panoramic views of Grandfather Mountain, Mount Mitchell, Table Rock Hawk's Bills, Clingman's Dome and the beautiful John's River Valley. The scenery is unsurpassed in America.

**Azalea, Laurel
and Rhododendron**

Will be in bloom during the first month of the 1924 season which will insure an added interest and beauty to guests who arrive early in the season.

Amusements

Golf, Tennis, Riding, Motoring, Tramping, Trout Fishing, Swimming, Dancing, Trap-shooting, Moving Pictures.

Resident physician. Dietitian. Telephone in each room. Cuisine unexcelled. 1924 season under management of

John J. Fitzgerald, of the Pinehurst organization

For Further Information Address

Mayview Manor,
Blowing Rock, N. C.

Deterioration of Duck

When Waterproofed

From a paper before meeting of American Society of Mechanical Engineers.

A DECIDED deterioration in the strength of canvas which could not be attributed to mildew or bacterial decay has been observed in an investigation on the effects of continuous exposure to the weather upon the water-resistance of treated canvas. This occurred when drying oils, which are commonly believed to "rot" canvas, were used, and also when the canvas had been treated with materials, ordinarily considered inert. Accordingly, a study was made of the effects which waterproofing materials have upon the tensile strength of cotton yarn when exposed to the weather. One of the most striking facts thus shown was that the addition of burnt umber to a drying oil treatment had a marked preservative effect upon the strength of the treated and exposed yarn. This suggested the possibility that pigments, when added to the waterproofing formulas developed in the laboratory, might reduce the injurious effects of the treatments upon the strength of cotton duck exposed to the weather. Further investigations were therefore started. Cotton duck was used, as the effects of treating materials upon yarn are not strictly applicable to woven fabrics.

In the investigations reported in Industrial and Engineering Chemistry particular attention was given to a comparison of two waterproofing treatments, which in previous tests had caused rapid deterioration of canvas, with treatments which were identical therewith except that they contained mineral pigments. Twenty-three pigments, including two asphalts, were used.

The effect of pigments in protecting fabrics from deterioration by sunlight has received some attention from previous investigators. In discussing the deterioration of doped aeroplane fabrics, Turner states that it was observed early in the late war "that where paint was used on the doped fabric, such as for identification circles on the wings, the fabric had not deteriorated nearly so much as at the unpainted parts." Turner, however, did not present any comparative data. Furthermore, Perrott and Plumb state that "as high as 20 per cent of carbon tends to preserve the fabric (rubber gas mask), especially when exposed to sunlight." This statement, however, was based on the performance of a single sample.

The use of pigments for protecting fabrics against the deteriorating effect of sunlight is covered, to some extent, in a patent granted to Gardner. In his specification the patentee states that he may "add to the ammonium phosphate solution (used to fireproof the fabric) from 2 to 10 per cent by weight of a pigment such as red iron oxide or carbon black, the purpose being to stop the light rays which affect the strength of the fabric." In this patent the use of one or more coats of dope containing, aluminium powder is

also specified, since, "due to the high light-reflecting surface of the fabric, the cloth remains strong for a long period of time." The exposure tests here described, however, had been begun a month before the granting of this patent, and they were completed before the patent came to the authors' attention.

The straight waterproofing treatments included the four formulas recommended in Farmers' Bulletin 1157 (one slightly modified) and four of the 18 formulas used in the weather-exposure tests reported by Veitch and Jarrell, as well as several others developed in the laboratory. While they are called straight waterproofing treatments to distinguish them from those to which pigment was added, several of them—those containing asphalt or pitch—might be said to contain pigment, the asphalt and pitch having a tendency to color the fabric and shut out the light. Three commercial preparations, none of which contained pigment, were used for comparison with the treatments developed in the laboratory. These commercial treatments were used in the condition in which they were received and according to the directions accompanying them.

The solid treating materials were weighted out in the proper proportions, mixed, melted and poured into the solvent. When raw linseed oil, boiled linseed oil, or boiled linseed oil and pigment were used, no solvent was added. Pigment was added at the rate of 1 lb. to 1 gal. of the prepared solution.

Twelve-ounce, grey, United States standard army duck, cut from the same bolt into 15 in. by 28.5 in. sections, was used for all treatments. The treatments were applied with an ordinary 2.5 in. paint brush and to only one side of the canvas. All treatments containing beeswax or paraffin were warmed slightly just before they were applied to the canvas, and all solutions containing suspended matter were kept thoroughly stirred during application.

Four untreated sections and four sections, to which one of the base treatments used in determining the effects of pigments, were used as controls.

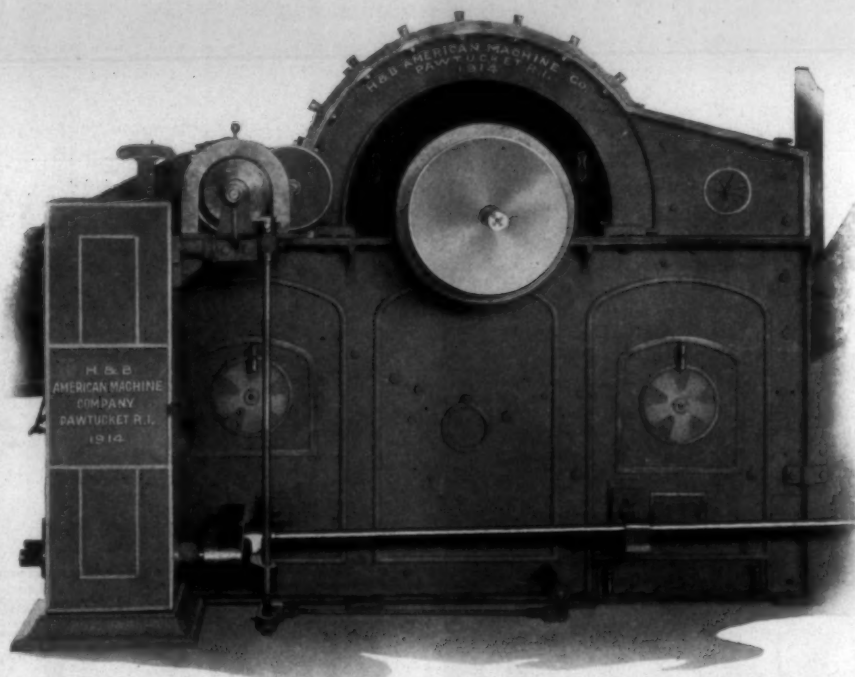
After applying the treatments and allowing them to dry, each section was cut crosswise into two pieces, one 16 in. wide and the other 12.5 in. wide. The narrower pieces were kept in the laboratory, while the wider ones were used in the exposure tests. The wider pieces securely attached to 12 in. boards, with their edges on the under side, were exposed to the weather in the open country near Washington, D. C., continuously from May 15 to November 15, 1921. The boards on which the pieces of canvas were laid were laid flat on trestles, so that the material would be exposed to the rays of the sun throughout the day. At the end of six months

(Continued on Page 34)

H. & B. AMERICAN MACHINE CO.

Pawtucket, R. I.

Builders of Complete Equipments of **Cotton Opening and Spinning Machinery**



Buckley Opener with 41" Beater and Piano Pedal Evener

This machine is acknowledged to be the most efficient and productive Cotton Opener yet developed for the treatment of medium and long staple cottons.

The Cylinder is 41" diameter with Steel Blade Fingers arranged spirally across its entire width, which insures all cotton coming in direct contact with the Beater.

The cleaning surface of the Cylinder Section is so arranged that the cotton passes over three-fourths of the circumference of the Cylinder.

The front and lower portions of the Cylinder are surrounded by adjustable Grid Bars, which are so arranged as to form a gridded conducting channel for the cotton in its passage up to the first pair of Cages.

The Piano Pedal Evener Motion insures uniformity of laps.

Let us show you how to increase quality and production and reduce your costs. Write for full description of this machine.

Southern Office
814-816 ATLANTA TRUST CO. BLDG.
Atlanta, Georgia

Improved Opening Machinery

(Continued from Page 8)

a complete Buckley opener which embodies a number of new features. This opener is so designed that when used in connection with their No. 3 feeder and breaker lap machine, it insures a continuous feed of full width and produces laps that are exceedingly even in both unit area and total weight. The cylinder in this opener is 41 inches in diameter and the cotton is combed from the feed rolls by the blades of the cylinder, which are transposed so as to cover the whole width of the feed rolls in one revolution of the cylinder. The cotton is thrown by the centrifugal action of the cylinder, revolving at a high surface speed, against the bars and the impurities ejected by a suitable arrangement of the bars and their spacing and angle.

Three-quarters of the periphery of the cylinder is surrounded by bars, this being made possible by the upward stroke of the beater and the entire passage up to the cages is entirely composed of grid bars, an arrangement which gives a very large cleaning area. Suitable dampers are arranged to closely regulate the air currents, insuring a uniform deposit of cotton on the cages of the breaker.

This new opener is fitted with a piano pedal link regulator or evenner that accurately governs the cotton passing through the feed rolls of the Buckley opener by automati-

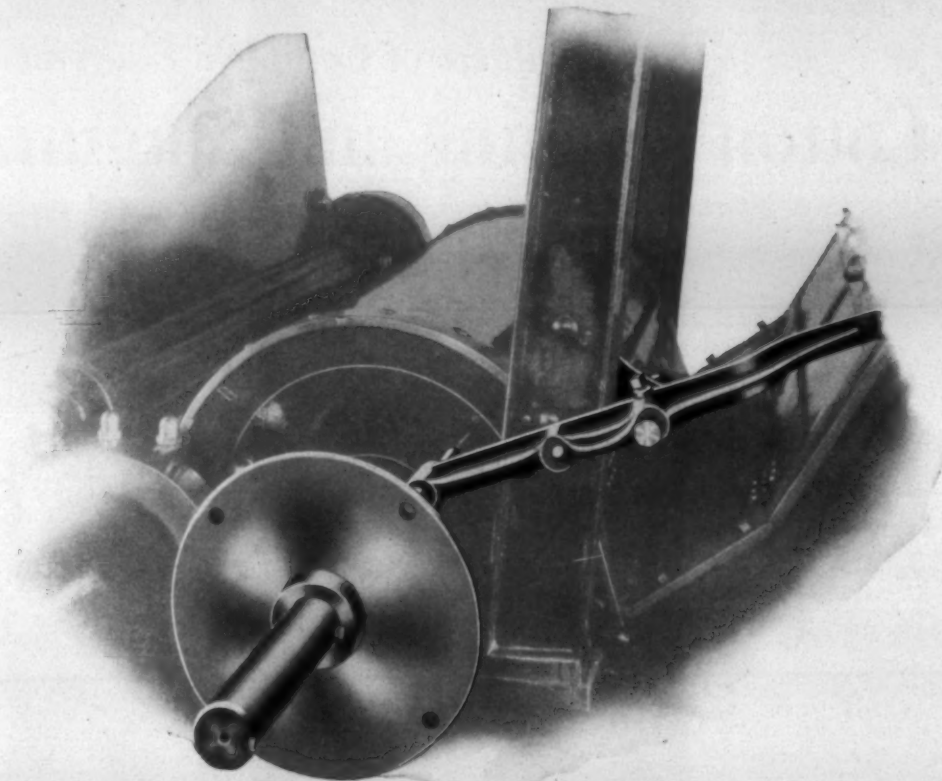
cally controlling the initial source of supply in the hopper of the feeder. This machine is recommended by the makers for all mills using medium and long staple cottons, because of its excellent cleaning qualities and the regularity of the laps it produces—the accuracy of which makes it practical to dispense with the usual intermediate process. The manufacturers can also furnish a double Buckley opener, combined with feeder and breaker lap machines.

Exhaust Opener.

This exhaust opener is usually

supplied as a part of a unit comprising the exhaust opener, No. 3 feeder, Buckley section — Breaker lapper, but it may be supplied singly with or without a cage section. The characteristic features of this exhaust opener consist of two

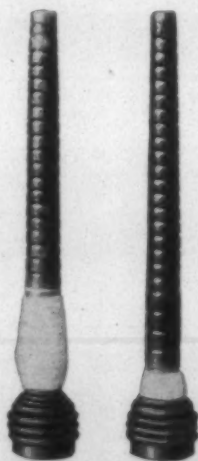
(Continued on Page 28)



H. & B. Safety Beater Lock.

“WE’VE GOT IT”

The Only Real, Reliable, absolutely fool proof, satisfactory “AUTOMATIC BUNCH BUILDER”
on the market



Before Installation
Holcomb Bunch
Builder
50 yds. of waste

After Installation
Holcomb Bunch
Builder
10 yds. of waste

Our Guarantee

The “HOLCOMB” Automatic Bunch Builder is the result of years of development work by a practical mill man. It is fully perfected and has long been in successful operation in a score of mills. It is fool proof; has no wearing parts to get out of order; requires no oil; builds the bunch automatically only when the ring rail is lowered to doff; and requires absolutely no attention of the operator for setting or resetting. Remove the “personal element!” Remove the waste! Saves 80 per cent. Write now for our proposition.

OVER 2,000 INSTALLATIONS NOW OPERATING

In view of comprehensive patent protection granted any infringement will be vigorously prosecuted

Holcomb Bunch Builder Co.

Birmingham, Ala.

Death of Judge Walter Clark

JUDGE WALTER CLARK, Chief Justice of North Carolina since 1903 and one of the most famous jurists in America, died at his home in Raleigh on Monday morning, May 19.

Judge Clark was the father of David Clark, editor of the Southern Textile Bulletin. Three of his other sons are also very prominently connected with the textile industry. They are W. A. Graham Clark, textile expert of the Tariff Commission in Washington; John W. Clark, president of Randolph Mills, Franklinville, N. C., and Thorne Clark, president and treasurer of the Anderson Mills, Lincolnton, N. C.

The death of Judge Clark ends one of the most remarkable public careers in the history of North Carolina. At 14 he was a drill master of Confederate troops, at 17 he was a lieutenant colonel in the Confederate Army. In the practice of law during his early manhood he was a citizen of outstanding prominence. For 35 years he sat on the Supreme Court bench, 21 years as Chief Justice, making his influence felt in all departments of the State Government, in the varied walks of daily life and leaving his impress on the laws of the Nation. He was an author of national reputation, an authority on legal and historical subjects.

His Illness Brief.

The Chief Justice had been bearing his share of an exceptionally

heavy amount of work falling upon the court during the past months.

He was about Saturday, attending a celebration in the county, although complaining that he was not feeling well. He arose Sunday morning and began to prepare for church, when forced to return to bed.

He rapidly grew worse and around noon lapsed into unconsciousness.

Members of his family were immediately called to his bedside. Growing steadily weaker through the night, he succumbed at 8 o'clock Monday morning. His sons and daughters were with him. He did not regain consciousness.

Entered Army at 14.

Judge Clark would have been 78 years old next August 19. He was born in Halifax county, the son of David and Anna M. Thorne Clark. As a boy he attended school at Horners and Graves Academy and Hillsboro Military Academy. In 1861, at the age of 14, he was one of a group of cadets sent to Raleigh at the request of the Governor to assist in drilling the recruits, then being enlisted in the Confederate Army.

He himself enlisted, in spite of his youth, and distinguished himself in active service and at 17 was promoted to lieutenant colonel, the youngest officer of this rank in the Northern or Southern armies.

After the close of the war he en-

tered the University of North Carolina, where he received his A. B. degree. In 1867 he was given the degree of A. M. and in 1868 became L. L. D. from the University. He went to Columbia Law School, Washington, graduated in 1867, and obtained his license to practice in 1868, then a young man of 22.

On Bench Nearly 40 Years.

He was in active law practice until 1885, when he was elected Judge of the Superior Court.

In the campaign of 1884, Judge Clark was brought forward as a candidate for Governor but the entrance of Daniel G. Fowle caused him to withdraw, the two being from the same county. In 1889 Governor Fowle appointed him to the Supreme Court bench, and he was subsequently re-elected upon the expiration of each term, receiving the endorsement of both fusionists and Republicans in the late 90s, although a Democratic nominee.

He was made Chief Justice January 1, 1902.

Judge Clark was an extremely busy man, devoting himself zealously to the duties of his judicial office and finding time besides to engage in study, work, and writing.

He annotated the "Code of Civil Procedure," third edition; compiled from 1894 to 1897; he was the author of "Histories of North Carolina Regiments in the Civil War," five volumes, and he has issued all the reprints of North Carolina Supreme Court with annotations. He edited the article on appeal and error in the Cyclopaedia of Law and Proce-

dures. He was a contributor to magazines on legal and historical subjects. Perhaps Judge Clark's most conspicuous effort was his translation from the original French of "Constant's Memoirs of Napoleon," in three volumes.

In compiling the histories of Confederate regiments, a labor for which he received no remuneration, Judge Clark wrote more than 10,000 letters with his own hands.

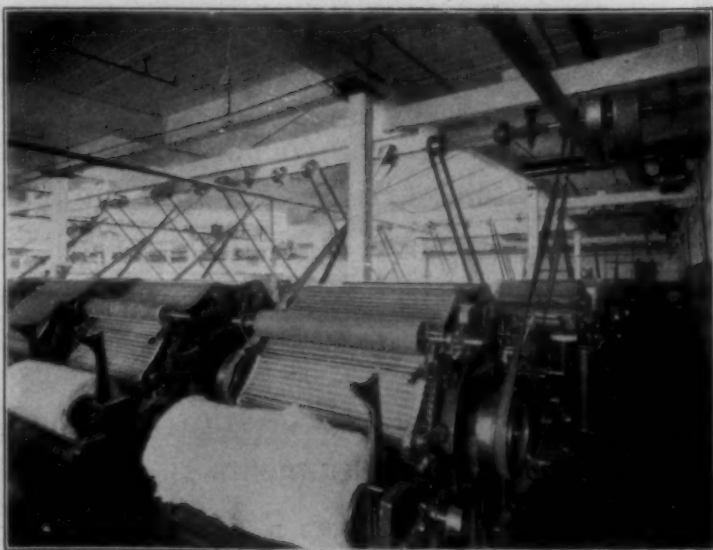
The cause of the Confederacy was always dear to him and on May 16 he was among those leading in memorial exercises at the Confederate plot here and later made a talk to the veterans at the Old Soldiers' Home.

During the war, Judge Clark served on the Federal War Labor Board with former President Taft, Henry Ford and other National leaders, the only Southern man among the seven members. He was also the only Southerner on the Board of Selection for the Hall of Fame. He had served on that board for 15 years or more.

Judge Clark was married January 28, 1874, to Susan W. Graham, daughter of W. A. Graham, twice Governor of North Carolina, United States Senator and Secretary of the Navy. She died in 1909.

The following sons and daughters survive: David Clark and Walter Clark, Jr., of Charlotte; W. A. Graham Clark, Washington; John W. Clark, Franklinville; Thorne Clark, Lincolnton; Mrs. J. E. Erwin, Morganton, and Mrs. John A. MacLean, Greenwood, S. C.

Textile Motors



30 H. P., 1200 RPM, Type "AR" Motor driving Carding Machines

ALLIS-CHALMERS Type "AR" Squirrel Cage Motors fit into every requirement of the Textile Industry.

They are designed for both horizontal and vertical drive.

Their steel frame construction makes for an extremely rugged motor.

Positive and efficient ventilation results in uniform temperatures, avoiding "hot spots" so deteriorating to insulation.

For more detailed information send for bulletin



ALLIS-CHALMERS
MANUFACTURING COMPANY
MILWAUKEE, WISCONSIN, U.S.A.

District Offices in All Leading Cities.



Advantages of Better Mill Equipment

Articles Submitted in Prize Competition On This Subject.

Contest Closes.

The contest for the best articles on "Advantages of Better Equipment" closed this week and no further articles can be submitted in competition for the prizes.

The articles submitted are unusually good and bring out many logical arguments for the use of better mill equipment. They will be published from week to week until all have appeared.

Number Eight

To prove the necessity of better equipment in the cotton mills of Dixie, we must first consider the present outstanding facts concerning the industry of cotton manufacture in the United States.

The industry is rapidly moving towards the cotton fields. This fact is evident, it is proven by the growth of the number of Southern cotton spindles as well as by the growth in the consumption of cotton in the Southern States. But New England will not stand idle and witness her hold on this, her historical and home industry, utterly taken from her without offering some effectual resistance. Recent discussions in the legislative bodies of Massachusetts and other New England States have proven that the Northerners are aware of the apparent deterioration in their industry.

Then what will be their method of defense? The answer is evident. It is only one word. It is competi-

tion. It will be as keen as any competition in the business of today. Competition means excelling quality and increased production. They may have to pay more for their labor, they may have to pay more for the transportation of their raw materials, but with the above mentioned characteristics the sale of their products is insured.

The Northern manufacturers will attain the lead in this industrial competition by applying to their mills new and efficient methods and equipment. They will spare no expense in equipping their plants with the latest improvements and thereby produce the highest of quality. They clearly realize that the expense involved is only temporary and on account of their increased quality and hence sales, in the long run there will be no additional expense.

Then the steps that the Southern producers must take in order to rival this competition and eventually gain the supremacy in the trade are clearly defined. They must have better equipment in their mills. They must adopt new and improved methods of manufacture. They must produce textiles of excellent quality, hence gaining the buyer's admiration and thereby fixing a market for their products.

A large number of the Southern mills have been exceedingly slow to realize that yearly science renders accessible to the textile industry hundreds of developments that tend to improve quality as well as efficiency in manufacturing. These improvements apply to every step

in the process from the opening of the raw stock through the shipping of the finished product.

To enumerate some of the latest of these would be long and tedious and hardly worth while. We can by referring to the leading textile journals acquaint ourselves with the names of the manufacturers of these improvements as well as with the products themselves.

There there is for our consideration the "Safety First" feature which has received so wide attention in the past few years. Modern machinery is far more safe in the mill as far as the operative is concerned than old machinery. New machines are equipped with the latest methods of guarding and protecting the employee against injury from carelessness or thoughtlessness.

Then the by-word of the Southern manufacturer should be "Efficiency." Efficiency is impossible without efficient equipment. This means new and well kept machinery. It means that in order that the Southern products may rival the Northern ones they must be of superior quality gained by efficiency.

Now, in conclusion, let us all hope that it is not only the dream of the idealist that Dixie will be the home of cotton industry from the sowing of the seed to the sale of the goods, finished and unrivaled by the products of any other section of the world, but that it is a truth that the future will soon prove. New, better and efficient equipment is the certain guide to this achievement.

"GEORGIA CRACKER."

Number Nine

Better equipment means almost a new set of machinery to some mills, while to others it means more machines for some of its departments, so high speed can be avoided.

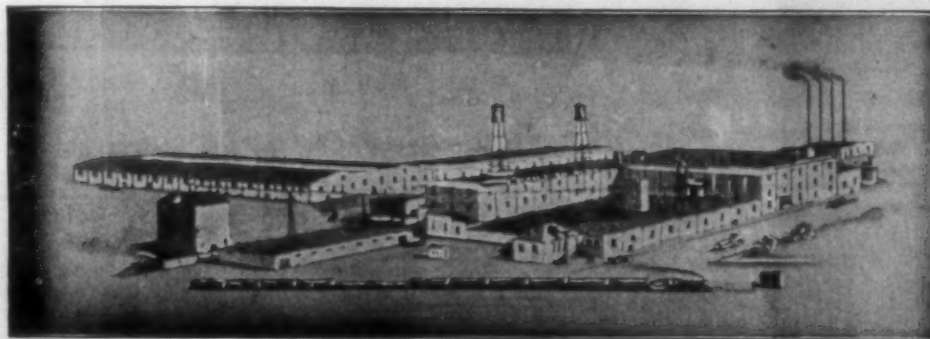
Writing of better equipment is hard to do without naming your favorite make of machinery.

I am going to write of a mill I know of, that if it was my mill I wouldn't swap it for any other mill I know of. This mill is below the Mason and Dixon line. I have seen quite a few mills in New England and many in the South, but this one has them all beat. It is of the latest design in every respect. A steel structure with saw tooth roof, and affords plenty of light. The floor is of hardwood and plenty of floor space in each department. It is equipped with the latest and best machinery money can buy. All the machines are motor driven except the cards and they have a counter shaft for every fifteen cards. The shaft is equipped with ball bearings, all power is transmitted from motor to shaft with chain belt.

The picker and opener equipment is of the very latest, such as bale breakers, vertical openers in tandem with adjustable grids in vertical openers, breakers and finisher pickers. Reeve drive for lifting aprons on bale breaker. Automatic distributors feeding hoppers of F. 5 feeders, F. 5 feeders delivering to a two-beater breaker with 40-inch and 20-inch beater, breakers are

(Continued on Page 26)

VICTOR MILL STARCH – The Weaver's Friend



It boils thin, penetrates the warps and carries the weight into cloth. It means good running work, satisfied help and one hundred per cent production.

We are in a position now to offer prompt shipments.

THE KEEVER STARCH COMPANY

COLUMBUS, OHIO

DANIEL H. WALLACE, Southern Agent, Greenville, S. C.

C. B. ILER, Greenville, S. C.

L. J. CASTILE, Charlotte, N. C.

Georgia Mill Men Meet

Atlanta, May 14.—George S. Harris, president of the Exposition Cotton Mills of Atlanta, was elected president of the Cotton Manufacturers' Association of Georgia at the twenty-fourth annual meeting of the association held at the East Lake Country Club. The meeting was the most largely attended and one of the most constructive ever held by the association.

Other officers elected at the business session were as follows:

S. Y. Austin, of LaGrange, vice-president; T. J. Callaway, secretary of the Milstead Manufacturing Company, Milstead, treasurer; W. M. McLaurine, Atlanta, secretary, and C. W. Cheers, Atlanta, traffic manager. Board of directors: Clifford J. Swift, vice-president of the Swift Spinning Mills, Columbus; L. L. Jones, Ashley Jewell, Chickamauga; Harrison Hightower, secretary, Thomaston Cotton Mills, Thomaston; W. D. Anderson, Allen Little and D. W. Anderson, manager of the Pacolet Mills, New Holland.

Resolutions.

The association adopted a resolution that "it is the judgment of the Cotton Manufacturers' Association of Georgia that the proposed Federal tax law, making tax returns public records, is unfair and unjust; violates the promises upon which

the passage of income tax laws were secured; is an unwarranted invasion of the rights of citizens to privacy, and will cause only injury to the taxpayers."

Another resolution adopted declared that it is the fixed judgment of the association that "the proposed Federal tax upon undistributed earnings, disregarding as it does all necessities of the respective corporations existing from time to time, conflicting with a policy which has served to build up the South, is unsound, unfair and unwise, and that such a tax will not only be destructive of the best interests of these United States, but especially and directly will prevent the growth and development of the South." It was further resolved that copies of the resolution be placed in the hands of each Senator and Representative in Congress from Georgia, and that the officers be directed to take diligent and persistent steps to prevent the facts and prevent the enactment of such a tax as is proposed, or any similar tax."

The association voted to appoint a special committee to investigate fully the various schemes now pending in Washington to lease Muscle Shoals and report back as soon as possible to the association. Resolutions to the memory of the late R. C. Freeman, J. D. Massey, of

Columbus; C. H. Williamson, of Macon, and J. D. Hammett, of Anderson, S. C., were adopted.

Golf Tournament.

J. S. Bachman, Sr., and J. C. Bachman, Jr., of Rome, were awarded the gold team trophy. J. L. Robinson and Grady Kennington, of LaGrange, were awarded the runner-up trophy. The individual low score was won by Harold Callaway, of LaGrange, and the runner-up was won by R. E. Hightower, of Thomaston. The foursome prize was won by Lee M. Jordan and George S. Harris, of Atlanta, Fred Gordon and E. P. Dis-muke, of Columbus. Awards were made by W. L. Roberts, who had charge of the athletic arrangements.

A feature of the banquet was the special table arranged at which eight of the ten living ex-presidents of the association were present, including Governor Walker and A. W. Cozart, of Columbus, the principal speakers of the evening. Frederick B. Gordon, president of the Columbus Manufacturing Company and former president of the association, was toastmaster.

B. S. Walker, of Monroe, and father of the Governor, and who served as the first president of the association from 1900 to 1904, reviewed the early struggles of the association, declaring that the ac-

complishments and deeds won in those days still live and today furnish the foundation upon which the present generation of textile men are standing.

Jeff Davis, of Toccoa, president from 1908 to 1910, declared that the bottom of the present business depression has been struck and that an upward rebound is near.

W. J. Vereen, vice-president of the Moultrie Cotton Mills, and president of the association in 1917-1918; J. A. Mandeville, of Carrollton, president in 1920-1921; Cason J. Callaway, of LaGrange, president in 1921-1922; Lee M. Jordan, president in 1922-1923, and P. E. Glenn, president in 1923-1924, also were introduced and made brief remarks.

Governor Walker in his address traced the history of this country. "Georgia is coming into her own through a program of better schools, roads and health," he declared. "I have never been a pessimist, and cannot be when I see such great signs of optimism about us."

Everett Mills.

Monroe, N. C.

J. O. Edwards _____ Supt.
W. W. Hinson _____ Asst. Supt.
Geo. Dearman _____ Night Supt.

Howard Bros. Mfg. Co.

ESTABLISHED 1866

Home Office and Factory, Worcester, Mass.

Southern Branch Factory

Southern Branch Office

E. M. TERRYBERRY, Southern Agent

121 South Forsyth St., Atlanta, Ga.

1126 Healey Bldg., Atlanta, Ga.

G. L. MELCHOR, Asst.

Cylinder and
Doffer Fillets
Napper Clothing

Stripper and
Burnisher Fillets
Emery Fillets

Top Flats and Lickerins Recovered and
Promptly Returned

Tempered Steel Twin and Domestic Iron Wire Heddles
The Best Materials Obtainable Make Up Our Products

Give us a trial on Cylinder and Doffer Fillets. This
will satisfy you as to the merits of our Card Clothing.

Attractive Mill Grounds Induce More and Better Work

Do you and your employees point with pride to the well planted, carefully kept grounds about the mill?

Do you realize that the daily inspiration of beautiful surroundings makes happier, more contented people, who will turn out more and better work?

Our Complete Landscape Service will Transform Mill Grounds

The great variety of trees, shrubs, and vines available for southern conditions will insure attractive, colorful surroundings during the entire year. There will be flowering shrubs from earliest spring till fall, followed in winter by showy berries, brilliant colored twigs, or luxuriant evergreen foliage.

Write or telephone us about it. We will send a representative to get your viewpoint and make suggestions.

The Howard-Hickory Company

Nurserymen—Landscape Gardeners

Hickory, North Carolina

Weaver's Meeting In Spartanburg

The meeting of the Weavers' Division of the Southern Textile Association, held last Friday at the Chamber of Commerce in Spartanburg, S. C., was one of the most successful sectional meetings the association has ever held. The attendance was large and many interesting problems of the weavers were discussed at the meeting. Almost the entire session was devoted to a discussion of sizing and the relative value of various methods and materials.

The meeting was presided over by W. H. Gibson, Jr., of Union, S. C., chairman of the Weavers' Division.

W. R. Cathcart, technical director of the Corn Products Refining Company, of New York, and Paul Seydel, of the Seydel-Thomas Company, Atlanta, Ga., were two experts who were brought to the meeting to discuss technical and chemical phases of the subjects under consideration.

The meeting consisted of two sessions, one in the morning and one in the afternoon. At 1 o'clock a splendid luncheon was served in the Franklin Hotel, musical entertainment being furnished through the courtesy of C. C. Clark, C. D. Maitgatter and the Montgomery-Crawford Company.

David Clark, editor of the Southern Textile Bulletin, attended the Weavers' Meeting, but was prevented from writing his account of the technical discussions by the death of his father.

Among Those Present.

Among those who attended the meeting were:

Arwood, T. W., O-Weaving, Carolina Cotton & Woolen Mills, Draper, N. C.

Baker, J. H., Cloth Room Overseer, Hartwell Mills, Hartwell, Ga.

Batson, Louis P., Sou. Rep., Shambow Shuttle Co., Greenville, S. C.

Bishop, O. E., O-Weaving, Clifton Mfg. Co., Converse, S. C.

Black, Walton, Salesman, Stein, Hall & Co., Inc., Greenville, S. C.

Bolt, A. D., Weaver, Mills Mill, Greenville, S. C.

Britton, W. J.

Buice, J. D., Supt., Chadwick-Hoskins Co., Pineville, N. C.

Burnham, B. K., Supt., Whitney Mfg. Co., Whitney, S. C.

Callat, Claude, Spinner, Courtenay Mfg. Co., Newry, S. C.

Cantrell, E. L., O-Weaving, Alexander Mfg. Co., Forest City, N. C.

Cantrell, F. Y., O-Weaving, Cliffside Mills (Haynes Plant, Avondale, N. C.

Carter, A. B., Gastonia, N. C.

Carter, G. N., Dover, N. H.

Carter, H. T., Salesman, Blockwood Coal & Coke Co., Spartanburg, S. C.

Casey, O. R., O-Weaving, Inman Mills, Inman, S. C.

Castleberry, Asst. Supt., Baldwin Mills, Chester, S. C.

Cathcart, Dr. W. R., Technical Director, Corn Products Refining Co., 17 Pattery Place, New York City.

Chapman, Jas. A., Jr., Vice-Pres. and Supt., Inman Mills, Inman, S. C.

Cilley, John, Jr., Designer, Brookford Mill Co., Hickory, N. C.

Clark, C. C., Salesman, Spartanburg, S. C.

Clark, David, Editor, Southern Textile Bulletin, Charlotte, N. C.

Cobb, W. W., Supt., Norris Cotton Mills Co., Cateechee, S. C.

Copeland, J. R., O-Weaving, Judson Mill, Greenville, S. C.

Cranford, H. C., O-Weaving, Jackson Mill No. 2, Wellford, S. C.

Cromer, J. L., Andrews Loom Reed & Harness Works, Tryon, N. C.

Crow, D. J., Weaver, Easley Mill No. 3, Liberty, S. C.

Curry, L. T., General Overseer, Lancaster Cotton Mills, Lancaster, S. C.

Dean, Geo. A., Sou. Mgr., A. E. Staley Mfg. Co., Spartanburg, S. C.

DeHart, F. D., O-Weaving, Rhode Island Mills, Spray, N. C.

Digby, T. J., Supt., Oakland Cotton Mills, Newberry, S. C.

Digby, T. J., Jr., Salesman, Baltimore Belting Co., Greer, S. C.

Ellis, T. L., O-Weaving, Carolina Cotton & Woolen Mills, Draper, N. C.

Escott, G. S., Associate Mgr., American Wool & Cotton Reporter, Boston, Mass.

Failor, Walter M., Charlotte, N. C.

File, H., Chemist, A. E. Staley Mfg. Co., Decatur, Ill.

Franks, E. A., Supt., Drayton Mills, Spartanburg, S. C.

Frye, G. V., Night Supt., Florence Mills, Forest City, N. C.

Gibson, L. B., Supt., Fairmont, S. C.

Gibson, W. H., Jr., Supt., Union-Buffalo Mills Co., Union, S. C.

Greer, W. W., Salesman, Seydel Chemical Co., 733 Augusta St., Greenville, S. C.

Gregory, W. L., O-Weaving, D. E. Converse Co., Glendale, S. C.

Grimes, M. A., Anderson, S. C.

Hall, John P., Weaver, Monarch Mills, Lockhart, S. C.

Harris, Carl R., Asst. Supt., Inman Mills, Inman, S. C.

Harris, Jack, Salesman, Holyoke Belting Co., Spartanburg, S. C.

Haskins, L. L., Distributor, E. F. Houghton & Co., Greenville, S. C.

Hawkins, D. E., Second Hand, Haynes Mill, Avondale, N. C.

Hunt, A. F., Supt., Marion Mfg. Co., Marion, N. C.

Hyder, J. J., O-Weaving, Lanett Mills, Lanett, Ala.

Jackson, D. G., O-Weaving, Limestone Mill, Gaffney, S. C.

Jackson, F. C. N., Salesman, Providence Drysalts Co., Providence, R. I.

James, J. M., O-Weaving, Chadwick-Hoskins Co., Pineville, N. C.

Kay, P. A., Weaver, Easley Mill No. 2, Liberty, S. C.

Lackey, L. S., Supt., Easley Mill No. 2, Liberty, S. C.

Laughlin, Jas. B., Cloth Room Overseer, Beaumont Mfg. Co., Spartanburg, S. C.

Laurence, S. B., O-Weaving, Gluck Mills, Anderson, S. C.

League, D. W., O-Weaving, F. W. Poe Mfg. Co., Greenville, S. C.

LeClair, E., Salesman, Atlanta Harness & Reed Mfg. Co., Atlanta, Ga.

Leister, W. P., Supt., Victor-Monaghan Co., Walhalla, S. C.

(Continued on Page 26)

Importance of Grid Bars in Cleaning Cotton

American mills for the last few years have begun to realize more fully the importance of opening and cleaning cotton and the manufacturers of opening and cleaning machinery have devoted a great deal of time and effort to improve the equipment for this purpose.

To increase the efficiency of the machines that open and clean cotton, the Brown-St.-Onge Co., Providence, R. I., have specialized in the manufacture of grid bars and have been very successful in making and marketing the Brown St.-Onge grid bar. They are in use in a large number of mills and have proven very efficient in cleaning cotton.

As cotton comes to the mill, it is filled with dirt and motes. In order to clean cotton and good running work, it is absolutely necessary to get rid of the dirt and motes.

Among the most vital parts of all machines that are used for handling the cotton as it comes from the bale are the grid bars. All these machines have grid bars, and while they are a very inconspicuous part of the

As we all know, the larger the opening the more dirt will fall out and pass thru. Many grid bars may have the first requisite; good striking position, but the second is hard to find. In the Brown St.-Onge grid bars there is combined both of these requisites and it was only through years of experimenting and actual operation that they were combined in one article.

The wide space between each bar, which is adjustable to each particular mill, will allow all the dirt possible to be taken out. This in turn means less fly and sweeping in your mill.

The picker loom is the foundation of good work in all the mills, it being the start from which the finished goods derive their appearance and quality. Anything that tends to improve this department will improve the whole plant.

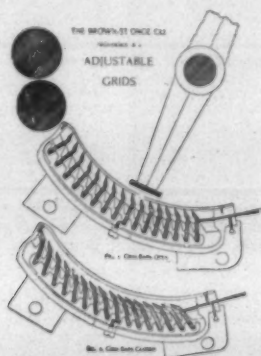
With the condition of the cotton market and the actual shortage in view, it becomes the duty of us all to see that what we have shall be utilized to its fullest capacity and that waste in all ways be done away with, as far as possible and yet maintaining quality.

The Texas Dollar

According to official statistics furnished by the United States Department of Agriculture, here's how the money added annually to the world's wealth by the cotton crop of Southwest Texas is "split." To the farmer, 18.9 cents out of a dollar; to the railroads for transportation, 1.1 cents; the farmer pays for the ginning out of his 18.9 cents and the railroads pay compressing charges. The factors, commission men, jobbers and retailers get the 79.95 cents that remain. North Carolina, a few years ago the poorest State in the Union, is now one of the wealthiest. The reason? Building of hundreds of cotton mills. Asininity sounds bad and may look worse. But it's the only term that applies squarely to a situation that, for a century, has permitted New England to use a product of the South for New England's benefit and at the South's loss. Southwest Texas should be more concerned than any other part of the greatest cotton growing section of the earth.—San Antonio Express.

Commerce Department to Urge Export Combination.

A strong argument in favor of the organization of a combination for export purposes under the Webb-Pomerene export law will be presented to the Associated Knit Underwear Manufacturers of America in convention at the Hotel Traymore, Atlantic City, by representatives of the Bureau of Foreign and Domestic Commerce of the United States Department of Commerce, according to an announcement made by Roy A. Cheney, executive secretary of the knitters' organization.



Brown-St. Onge Grid Bar.

equipment, if they do not operate efficiently and constantly, there will be trouble with the cotton in each succeeding process through the mill. If trouble from cotton caused by imperfect action of the grids does not develop at the carding process, it will show up in other departments and in the long run it will cost more than if the grid bars had thoroughly taken care of it.

The grid bars, do all that they are intended to do, should be constructed so that they will be in proper position in relation to the beater, so that the striking blow will separate the motes from the good cotton and shake out the dirt.

The Brown St.-Onge Company, in developing their grid bars, have constructed them on the principle that this striking blow must never be delivered in such a manner as to break the motes up. If the blow does break up the motes, it will result very serious defect that seriously evry serious defect that seriously hurts the sale of the cloth.

With grid bars made so as to allow this striking blow to be delivered at just the right angle together with the "Adjustable" feature of this grid bar in the work of the grid bars makes for great efficiency.

A Dangerous Competitor—FIRE

Fire insurance adjustments will recoup your losses, but cannot help you fulfill contracts or replace profits that you didn't make.

Over 70% of the cotton spindles of the United States and Canada are insured in the New England Factory Mutual Insurance Companies. To be able to say that your factory complies with the standards set by these companies, goes a long way in convincing your customers and your bank that you will be able to fulfill your contracts as to delivery dates.

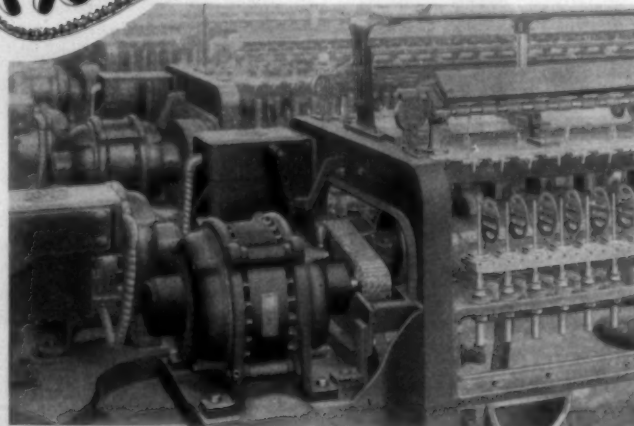
For the purpose of furnishing better service to our present and prospective members, we have located a representative in the South. Write him today for full information.

Firemen's Mutual Insurance Company

G. H. STEUART, Southern Representative

2123 Greenway Street
Charlotte, N. C.

MORSE SILENT CHAIN DRIVES



Maximum Transmission of Power With "The Morse"

Morse Silent Chain Drives give you the full benefit of the power developed by your motors. They insure maximum production by transmitting 98.6% of the motor's power to your machine.

Morse Chain Company

Ithaca, N. Y.

CHARLOTTE

BOSTON

There is a Morse Engineer near you

SOUTHERN TEXTILE BULLETIN

Member of Audit Bureau of Circulations
Member of Associated Business Papers, Inc.

Published Every Thursday by
CLARK PUBLISHING COMPANY
Offices: 39-41 S. Church St., Charlotte, N. C.

THURSDAY, MAY 22, 1924.

DAVID CLARK
D. H. HILL, JR.
JUNIUS M. SMITH

Managing Editor
Associate Editor
Business Manager

SUBSCRIPTION

One year, payable in advance	\$2.00
Other Countries in Postal Union	4.00
Single Copies	.10

Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

ADVERTISING

Advertising rates furnished upon application.
Address all communications and make all drafts, checks and money orders payable to Clark Publishing Company, Charlotte, N. C.

Death of Father of David Clark

DAVID CLARK was called to Raleigh, N. C., Sunday afternoon by the sudden illness of his father, Walter Clark, Chief Justice of the Supreme Court of North Carolina.

As Judge Clark passed away Monday morning and the funeral followed on Tuesday, David Clark did not return to Charlotte before the publication of this issue.

We offer this explanation of the fact that we are not carrying full reports of the meetings of the Cotton Manufacturers' Association of Georgia and the Weavers' Division of the Southern Textile Association, both of which were attended by Mr. Clark last week. His accounts of the meetings had not been written prior to his being called to Raleigh.

Profits Will Increase By Efficiently Opening Cotton

THE Better Equipment Campaign this week begins the technical discussion of the advantages of using modern machinery in the various process of cotton manufacture. The subject featured this week, in both the special advertising and reading articles, is improved opening equipment. It is a subject of extreme importance to all Southern mills and deserves their most careful consideration.

English mills have for many years paid more attention to the opening of cotton than American mills and because of this have been able to produce yarns and goods of better quality than American mills produced from cotton of the same grade.

Every practical cotton manufacturer knows that no mill is better than its opening equipment. The successful handling of the stock in every department of the mill depends upon the treatment it receives

in the preparatory processes. The quality of the production hinges upon the question of whether or not the cotton was thoroughly opened and cleaned before going to the cards. The advantages of light carding, now so well recognized, are possible only in the mill that uses the most modern and approved types of opening equipment.

Many Southern mills have for years struggled along with inadequate opening facilities. Many of them are still trying to force the cards to clean the cotton. This mistake not only makes them use a higher grade of cotton than should be necessary, but results in excessive waste, poor running work and an inferior quality of output. The function of the cards is entirely separate from that of the opening equipment and to try to make them do this work is not only poor manufacturing practice, but false economy as well.

The Southern Textile Association, through its Carders' Division, has made a close study of opening and cleaning and the results as reported at the various meetings of the Carders has proved a very strong argument in favor of improved opening equipment.

The machinery manufacturers, in recent years, have developed their opening machinery to a very high degree of efficiency. The results these machines produce are incomparably better than the work of the earlier and cruder types of equipment.

Although we are now in the midst of a very severe period of depression, the experience of previous years teaches us that such times are always followed by periods of marked activity. Market conditions, while extremely poor, are shaping themselves in a manner that indicates a very heavy demand for yarns and goods later on.

In the face of the present cotton shortage, the matter of properly opening and cleaning cotton be-

comes an economic as well as a manufacturing problem. Good cotton is hard to get now and will be exceedingly scarce when normal operations are resumed. Prices may logically be expected to be much higher. The mill that is properly equipped to make the best and most economical use of the cotton it consumes will enjoy a decided advantage when the buying movement develops.

While New England mills debated the advisability of installing automatic looms, Southern mills adopted them and now New England is paying for the folly of trying to do business with antiquated machinery.

The Southern mill that neglects to modernize its opening equipment is throwing away its chances to meet the competition of the future.

Sees Need of Higher Tariff

IN a letter to the Southern Textile Bulletin, J. C. F. Clark, president of the Sutherland Manufacturing Company, Augusta, Ga., stresses the need of a higher tariff on cotton goods and brings out some very interesting points relative to the present textile situation. On account of the general interest in this phase of the situation, we are reproducing his letter herewith:

"In the Southern Textile Bulletin of the 8th we note with interest the two articles on the editorial page entitled 'For Profits—Which Way Would You Plow Today,' and 'English Mill Got the Order.'

"In the first article we note you state: 'The curtailment of the mills in the United States is now upon a basis of 6,000,000 pounds per month as compared with the production last year. Such a shrinkage in the output of cotton goods is rapidly creating a vacuum and when the buyers finally enter the market they will find a shortage.'

"Enclosed we are sending you a page from the New York Commercial, under date of the 2nd, from which you will note statement as follows: 'British Cloth Dumping Forces U. S. Mills to Close,' 'New England Mill Men Seek Flexible Tariff Action to Stop General Curtailment,' 'How British Cloth Dumping Menaces American Industry,' 'Imports Averaging 20,000,000 Yards a Month Compared with 4,000,000 in 1919.'

"When we fully realize that 20,000,000 yards of goods, made by cheap foreign labor, are being imported monthly it is hard to believe that there will come a demand for our goods even with the curtailed production of 6,000,000 pounds a month, but we sincerely trust that it will come, for it is badly needed, as conditions are indeed deplorable in the mill business. It looks to us like the importation of cotton goods is going to become even greater unless something is done to stem the tide. We understand that 5,000,000 bales of cotton have already, up to this time, been exported this year, which is 200,000 bales more than the total exports for last year, and if Europe continues to recover the exports will undoubtedly continue

to grow and this cotton will be manufactured into cloth, by the cheap foreign labor, and accordingly that much more cloth will enter this country than is now coming in.

"We understand that the tariff was reduced during President Wilson's administration, probably when European production was low and we were not fearful of imports, and that the tariff has never been restored to the old basis, in spite of the fact that European conditions are improving and their industries becoming a menace to ours.

"We are glad to note that the National Association of Cotton Manufacturers have taken cognizance of the matter and that the Republicans seem to be trying to do something towards raising the tariff and regret that the Democrats seem to be opposing same.

"Now that the South has become a great textile country and our industry threatened, it seems to us that we should take steps to rectify the present condition of affairs and not be satisfied to say that it is due to a buyer's strike or something else and let it go at that.

"We believe that the tariff should be a local and not a political issue but, if it cannot be made so and if we cannot have a tariff plank in our platform, then we had better change our politics, as a matter of self-protection.

"In addition to the enormous quantities of goods coming into this country, we received in 1922 850,000,000 yards of burlap, last year 1,000,000,000 yards—last month 61,800,000 yards. A large part of this is a competitor of our cotton goods. Our own mill, for instance, was equipped, as were many others, for coarse numbers and we have for years made heavy goods, but for the past few years the buyers of some of our coarse fabrics have changed over to the use of burlap. This has caused us to go on to finer goods, which puts us in competition with those mills that were already on these finer goods. Our mill alone does not cut much figure, but the total of the other mills that have changed over, as we have done, amounts to something."

American Cotton Manufacturers' Convention

PLANS are virtually complete for the twenty-eighth annual convention of the American Cotton Manufacturers' Association, to be held at Atlantic City May 27 and 28. Headquarters for the meeting will be at Hotel Traymore. Hotel reservations indicate that the attendance will be unusually large.

A program of unusual interest has been prepared for the meeting. Among the speakers will be Norman H. Johnson, secretary of the Southern Wholesale Dry Goods Association; Curtis Dight Wilbur, Secretary of the Navy; Dr. D. W. Daniel, of Clemson College, and Henry Mace Payne, consulting engineer of the American Mining Congress.

A full report of the meeting will be carried in these columns next week.

Personal News

W. T. Garner has been appointed overseer weaving at the Peerless Mills, Thomaston, Ga.

B. C. Roberts has accepted a position with the Aldora Mills, Barnesville, Ga.

Wm. H. Snow has been appointed overseer of spinning at the Washington Mills, Tenille, Ga.

Andrew Greer has been appointed overseer carding at the Georgia-Kincaid Mill No. 5, Griffin, Ga.

John Rawls has been promoted to second hand in No. 1 weaving at the Griffin Manufacturing Company, Griffin, Ga.

V. J. Deas has resigned as overseer weaving at the Griffin Manufacturing Company, Griffin, Ga., and accepted a similar position with the Canton Cotton Mills, Canton, Ga.

E. W. Mayfield has been promoted from second hand in No. 1 weaving to overseer weaving at the Griffin Manufacturing Company, Griffin, Ga.

C. W. Wilbanks has resigned as night overseer spinning at the Chadwick-Hoskins Mill No. 5, Pineville, N. C., and returned to his home in Whitmire, S. C.

William Hinchcliffe, who has been superintendent of the mills of the Dallas Manufacturing Company, of Huntsville, Ala., for the past 25 years, has resigned, and will retire to his Florida home.

J. A. Thompson, formerly overseer of spinning at the Fulton Bag and Cotton Mills, but more recently spinner at the Bradley Manufacturing Company, Columbus, Ga., has been appointed overseer spinning spooling and warping at the Canton Cotton Mills No. 1, Canton, Ga.

Barney T. Hudson, who has for the past 18 years devoted his entire time to the textile industry and who was formerly night overseer in the spinning department at the Perkins Hosiery Mills at Columbus, Ga., has accepted a position with the Wright Electric Company, of Birmingham, Ala., as chief electrician.

A. E. Treganza Now With Chicago Fuse Manufacturing Co.

A. E. Treganze, formerly sales manager of Economy Fuse Manufacturing Company, Chicago, has recently gone with the Chicago Fuse Manufacturing Company, also of Chicago, as assistant to the president in charge of commercial relations.

Address Wanted.

The address of G. M. Loggins, last heard of at Cramerton, N. C., is wanted by C. C. Stacy, of Gaffney, S. C., who will appreciate it if anyone can give him Mr. Loggins' address.

Obituary

W. E. Harvell.

W. E. Harvell, superintendent of the Southern repair shops of the Saco-Lowell Shops, of Charlotte, died Tuesday night at the home of his sister in Charlotte after an illness of only a few days. Heart trouble was the cause of his death.

Mr. Harvell had a long and honorable record of service with the Saco-Lowell Shops, having been in their employ for 22 years. He had a very wide acquaintance with mill men and was considered an authority upon textile machinery. He had for years been prominent in Charlotte fraternal circles and was buried with Masonic honors.

Mr. Harvell is survived by one son, W. E. Harvell, Jr., one brother and one sister.

A. C. Canterbury.

A. C. Canterbury, overseer spinning at the Eva Jane Mills, Sylacauga, Ala., died last Sunday afternoon at his home, having been stricken with paralysis.

Mr. Canterbury had been overseer spinning at the Eva Jane Mills for about three years, going there from Meridian, Miss., where he was superintendent of the Alden Knitting Mills.

He is survived by his widow, one daughter and four sons, all of whom live in Sylacauga except one.

Mr. Canterbury had for years taken an active part in civic activities and was one of the best known citizens of his town. He was especially interested in boys' work and helped organize the Boy Scouts in his section.

Spindle Hours Show Drop

Washington, May 21.—Cotton spinning during April was less active than during March and showed a heavy decline from April a year ago, the Census Bureau's monthly spinning activity report issued today shows. Active spindle hours were two billion below those of a year ago.

Active spindle hours for April numbered 6,769,714,331, or an average of 179 per spindle in place, compared with 7,072,965,369, or an average of 187 for March this year, and 8,787,443,897, or an average of 236, for April, last year.

Spinning spindles in place April 30 numbered 37,745,967, of which 31,871,665 were operated at some time during the month, compared with 37,761,970 and 32,392,171 in March, this year, and 37,287,265 and 35,515,791 in April, last year.

The average number of spindles operated during April was 30,177,468, or at 79.9 per cent capacity on a single shift basis, compared with 31,125,530, or at 82.4 per cent capacity, in March, this year, and 40,759,979, or at 109.3 per cent capacity, in April, last year.

Cotton-Bleachers

Your requirements are:

Strength and Durability,
Softness and Elasticity,
A Permanent White,
Saving Weight and Yardage,
Fool-proofness,
Low Cost,
Absence of Poison-gases.

You do not get them all
unless you bleach with
the Solozone Process.

The Roessler & Hasslacher Chemical Co

709 Sixth Ave.

NEW YORK CITY

Improved Loom Harness

Mill after mill on print cloths, sheetings, drills, colored goods, denims, as well as on all classes of fancy weaves in cotton, silk and worsted goods, is equipping looms with our "Duplex" flat steel harness.

YES? WHY?

"Duplex" lasts twelve times as long as twine harness, can be changed more quickly from one cloth to another, and is more satisfactory in every way than any other loom harness known.

Note: Our loom harness is shipped out completely assembled and ready for drawing your warps in plain or fancy weaves, or heddles can be assembled by you on the frames at your mill.

STEEL HEDDLE MFG. CO.

GREENVILLE

PHILADELPHIA

PROVIDENCE

"Duplex" Loom
Harness—complete
Frames and
Heddles fully
assembled

Harness Frames
Selvage Harness
Leno Doups
Jacquard Heddles

SOUTHERN PLANT

Greenville, S. C.

HAMPTON SMITH
Southern Manager

Drop Wires
Nickel-Plated
Copper-Plated
Plain Finish

Improved
Loom Reeds
Leno Reeds
Lease Reeds
Combs

MILL NEWS ITEMS OF INTEREST

Spindale, N. C.—The Elmore Company, which is building an addition to its yarn mercerizing and finishing plant, has let contract to the Bahnson Company, Winston-Salem, N. C., for humidifying equipment.

Searcy, Ark.—Business men of this place are corresponding with Eastern mill men with a view of erecting a cotton mill here. The development of a hydro-electric plant on the Little Red River, near here, makes power available.

Anniston, Ala.—It is reported that that Adelaide Cotton Mills will make a number of improvements, including an extension to the building, the erection of a number of new homes and the development of parks and playground.

Nashville, Tenn.—The Dupont Fibersilk Company, Buffalo, N. Y., has let contract to Ingall Iron Works, Birmingham, Ala., for structural steel for building the plant which they will erect here to make fibersilk.

Greenville, S. C.—The plant of the Southern Bleachery at Taylors, near here, is expected to begin operations this week. It will have an initial capacity of 1,250,000 yards per week and it is planned to practically double the output later.

Monroe, N. C.—The Bearskin Mills, which were sold a second time by receivers, are expected to be taken over this week by the Monroe Mills, which was recently organized for the purpose. It is understood that the Johnston interests of Charlotte are the controlling stockholders in the company.

Tuscaloosa, Ala.—To encourage new mills to locate here, the county authorities of Tuscaloosa county have exempted new textile companies from county taxation for a period of five years. The Chamber of Commerce of this place is making efforts to have two new plants built here.

Gastonia, N. C.—The building of the Gastonia Cotton Manufacturing Company was sold at auction for \$27,000 to R. B. Babington, W. C. Adams, Hugh Pinnix, R. M. Johnston and J. Spencer Love. It is understood the new owners will cut the building into several sections and lease it for small manufacturing purposes.

The machinery of the Gastonia Cotton Manufacturing Company was moved to the Burlington Cotton Mills, Burlington, N. C., some months ago.

The Gastonia Cotton Manufacturing Company was the oldest mill here, having been built in 1889 by George A. Gray and R. C. G. Love.

THE FARISH COMPANY COMMISSION MERCHANTS

100 WORTH STREET
NEW YORK



Specialties for Cotton

MONOPOLE OIL

Registered Trade Mark No. 70991

CREAM SOFTENERS

Neutral Sulphonated Cotton Softeners

HYDROLIQUID

for stripping

BLEACHING OIL

Used in Kier boil for dissolving Cotton wax.

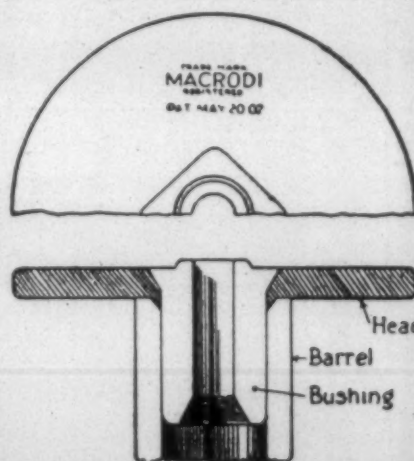
SOLUBLE OIL

Alizarine Assistant—Turkey Red Oil—Sulphonated Castor Oil

JACQUES WOLF & Co.

MANUFACTURING CHEMISTS AND IMPORTERS

PASSAIC, N. J.



The Macrodi FIBRE HEAD WARP SPOOL

after fourteen years of the hardest mill use has demonstrated that it is

Durable—Economical

Write for particulars of the added traverse with corresponding increase in yardage—an important feature of this spool.

Prompt deliveries in two to three weeks after receipt of order.

MACRODI FIBRE CO.
Woonsocket, Rhode Island

Members American Society Landscape Architects

E. S. DRAPER

11 E. Fifth St.
CHARLOTTE, N. C.

101 Marietta Bldg.
ATLANTA, GA.

LANDSCAPE ARCHITECT and ENGINEER

Town Planning and Mill Village
Developments
Parks, Real Estate Subdivisions
and Cemeteries
Resort Hotels and Country Clubs
Private Estates and Home Grounds

Complete Topographic Surveys
General Designs, Planting, Grading
and Detail Plans
Supervision of Landscape and
Engineering Construction
Sewer and Water Development

Largest Landscape Organization in the South

Rockingham, N. C.—The Roberdel Manufacturing Company has let contract to T. C. Thompson Bros., Charlotte, for erecting a conditioning room at their No. 2 mill for conditioning filling. The company has awarded contract to the Bahnson Company, Winston-Salem, for humidifying this conditioning room.

Lexington, N. C.—Erlanger Cotton Mills has let contract to E. H. Clement Company, Charlotte, N. C., for construction of swimming pool 45x90 reinforced concrete, color, green. Bath houses, pergola, wading pool, etc., to be constructed later. Cost \$10,000. E. S. Draper, landscape architect and engineer, 41 East Fifth street, Charlotte, in charge of development, preparation of plans, etc.

Houston, Tex.—The new Houston Cotton Mills, to be built here, as recently noted, will manufacture cotton blankets. The first unit will consist of a main mill building, one story and basement, standard mill construction 138x338 feet; two-compartment warehouse with opener room 100x125 feet and boiler room. Plans, which are by J. E. Sirrine & Co., Greenville, S. C., are now in hands of contractors and contract is expected to be let May 23.

Swannanoa, N. C.—The Beacon Manufacturing Company, of New Bedford, Mass., which will erect a blanket manufacturing plant here, as previously noted, has let contract to Morton C. Tuttle, of Boston, for construction of the building. Details of the building have not yet been announced. It will contain 200,000 square feet of floor space and cost about \$1,000,000 with equipment. The mill company has a site of 175 acres and the landscape work and village layout will be handled by E. S. Draper, landscape architect, of Charlotte.

Lyman, S. C.—Machinery is being installed, set in order, boilers are being fired up and tested, the gigantic filtering plant is being tried out, and all officials with possibly two exceptions have arrived at the plant, goods are being shipped in from other mills of the Pacific group for the bleachery, and according to General Superintendent Leonard S. Little, of the Lyman department of the Pacific Mills.

Things are shaping up for the bleachery and mill to begin early operations. There are 25 families in employees' homes in the village, and persons are coming daily for employment.

Work on the handsome community building, the school, the church and the residence of General Superintendent Little and other officials is being steadily pushed. Walter Cook, chief architect of Lockwood, Greene & Co., with headquarters in Boston, Mass., is inspecting

the entire appearance of things in and about the village. Mr. Cook designed a number of the important buildings now under process of construction, as well as the employees' homes. Ira Kaufman, resident engineer of Lockwood, Greene & Co., who has been at Lyman from the start, has kept things going all along up to the standard.

Mr. Little announced that Parklap, Inc., the contractors, are clearing up their entire work, and the Minter Homes Company, contractors for building the employees' homes, have practically completed the erection of the 320 employees' dwellings.

The entire development at Lyman represents an expenditure of from four to five million dollars.

Spartanburg Mill Dividends

Spartanburg, S. C.—A total of \$342,274 in dividends was voted by boards of directors of six cotton mills, located in Spartanburg county and other sections of the South, at meetings held here. The dividends represent the returns from total investments of \$9,090,600, according to capitalization figures furnished by stock dealers.

The biggest dividend was declared by Pacolet Mills, when a 5 per cent semi-annual dividend was voted on common stock and 3 per cent on preferred stock. The mill is capitalized at \$2,000,000 common stock and \$2,000,000 preferred stock. The dividend will total approximately \$160,000.

Next in order was the Spartan Mill, with 4 per cent declared on \$2,000,000 common stock, the dividend amounting to \$80,000. There are no preferred stockholders.

Laurens Mill, at Laurens, voted 4 per cent dividend on capitalization of \$1,050,000 common stock, or \$42,000. All preferred stock has been retired.

Whitney Mills, with \$600,000 common stock, will pay \$18,000 at 3 per

cent dividend. No preferred stock is held.

Gainesville Mill, at Gainesville, Ga., netted \$30,124, when directors met there last Thursday and voted 4 per cent dividend on common stock and 3 per cent on preferred. The mill has a capitalization of \$490,000 common and \$350,000 preferred.

Drayton Mills, with a capitalization of \$250,000 common stock and \$350,000 preferred, declared 3½ per cent dividend on the latter, netting \$12,250.

Referee in Mathieson Litigation Reports for Arnold, Hoffman County

Providence, R. I.—A preliminary decision in the litigation between Mathieson Alkali Works and Arnold, Hoffman & Company of this City has been made by James H. Higgins as

master who has filed his report and findings sustaining certain claims of Arnold, Hoffman & Company. The question decided by the master before whom the case has been pending for nearly three years, was whether or not the Mathieson Alkali Works in consequence of direct or imputed knowledge acquiesced in any of the transactions of Arnold, Hoffman & Company, of which the Mathieson Alkali Works complains. The master found that knowledge of Arnold, Hoffman transactions by officials at the Mathieson plants and knowledge of the contents of plant records are both to be imputed to the Mathieson board of directors and that in consequence Mathieson cannot now recover against Arnold, Hoffman & Company for some of the transactions. There have been no findings as to the sufficiency of the Mathieson's defence to the suit

brought by Arnold, Hoffman & Company's right to recover.

The master's report was presented to Judge Brown of the United States District Court at Providence by whom the case will now be taken up, and in due course the claims of both sides will be presented to the court. Arnold, Hoffman & Company, or its predecessors, for approximately 40 years were selling agents for the Mathieson Corporation.

In 1919 the Mathieson corporation severed relations, claiming that the performance of Arnold, Hoffman & Company, as agents in the past, justified it in so acting. The Mathieson Corporation then moved to New York.

In 1920, Arnold, Hoffman & Company brought suits against the Mathieson Works in the Superior Court in Providence for damages for alleged breaches of contract, and also on specific contracts by which the Mathieson Works had agreed to sell Arnold, Hoffman & Company, for its own account certain large quantities of its products.

Later the Mathieson Works brought suits in New York State against Arnold, Hoffman & Company, and Mr. Arnold individually, and suits in equity in the Federal District of Rhode Island against Arnold, Hoffman & Company, and also against Mr. Gadding individually.

Barber Mfg. Co. Will Move to Charlotte.

The Barber Mfg. Co., of Lowell, Mass., well known manufacturers of spinning tapes and similar products, have leased an entire floor of the new addition to the Wade Loft Building in Charlotte and will move their plant to this city.

This company has for many years enjoyed a large business with Southern mills and their decision to move South will be received with unusual interest.

LOOM STRAPPING

Designed and made of leather of the proper quality, weight and toughness of fiber to meet the actual working stresses. The use of judgment in manufacture means to you,

Gain in Production at Lowest Strapping Costs in Keeping With Service Required

We specialize and know your looms.
Ask your jobber.

The Druid Oak Belting Co., Inc.
Baltimore—Boston

Established 1896

Incorporated 1914

LOWELL SHUTTLE COMPANY

Manufacturers of

BOBBINS POOLS SHUTTLES

Write or Telegraph for Quotations

Office and Factory: 19 Tanner St., LOWELL, MASS

THE CHOICE OF A HUMIDIFYING SYSTEM

must be one that for simplicity with great capacity and economy in maintenance produces uniformly such conditions that may be determined for the different requirements of the work. In the American Moistening Company's method of humidifying, all such requirements are **GUARANTEED**

Our COMINS SECTIONAL HUMIDIFIERS

Our FAN TYPE and HIGH DUTY HUMIDIFIERS

Our VENTILATING Type of Humidifier (Taking fresh air into the room from outside)

Our ATOMIZERS or COMPRESSED AIR SYSTEM

Our COMPRESSED AIR CLEANING SYSTEM

Our CONDITIONING ROOM EQUIPMENT

Our AUTOMATIC HUMIDITY CONTROL (Can be applied to systems already installed)

Our AUTOMATIC TEMPERATURE CONTROL

Are all STANDARDS OF MODERN TEXTILE MILL EQUIPMENTS

AMERICAN MOISTENING COMPANY

BOSTON, MASS.

SOUTHERN OFFICES, 276 Marietta St., Atlanta, Ga., No. Charlotte, N. C.

RUSSELL GRINNELL, President

FRANK B. COMINS, General Manager

THE ARABOL MANUFACTURING CO.

OFFICES:
110 East 42nd St.
(New Bowery Savings Bank
Building)
New York City

EXPORTERS—MANUFACTURERS—IMPORTERS

WORKS:
Brooklyn, N. Y.
Cicero, Ill.
Brampton, Ont.

of any kind of Preparations for

SIZING

SOFTENING

FINISHING

WEIGHTING

for all Textile Purposes

Sizing Preparations, Tallows, Filling Materials, Printing and Stiffening Gums, Rosin Soaps, Dextrines, Soluble Oils, 50%-75% Guaranteed

Boil-Off Oil

Degumming Oil

Hosiery Oil

Many years' practical experience of our technical staff enables us to meet all your requirements. Our Textile Research Laboratories are at your disposal. Your correspondence and trial orders are solicited.

Southern Agent: **Cameron McRae, Concord, N. C.**

P. D. JOHNSON, Georgia Representative, Atlanta, Ga.

HERBERT BOOTH, Tenn.-Ala. Representative, Chattanooga, Tenn.



TRADE MARK

Number Nine.

(Continued from Page 18)

equipped with evener motions. Finisher and breaker have ball bearings for their high speed shafts. Cards are equipped with a good stripper and are driven by shaft for each fifteen cards. This shaft is equipped with ball bearings and is motor driven with chain transmission. This mill has enough cards to run doffer seven to eight turns per minute and card a sliver 52 grs. per yard and then not have to rush their cards for production.

Drawing is driven by motor to each twenty deliveries with low front roll speed, and revolving clearers and full can and target stop motion with hardened front roll.

Slubbers and roving are of the latest and each machine is driven by an individual motor, so is the

spinning and twisting, weaving and all the rest of machinery individual motor driven, all fluted front rolls of drawing, spinning and roving machinery is hardened and none of this machinery exceeded the speed limit given by the machine manufacturer.

The breaking strength of yarn at this mill is far above the average or standard. The help have a good place to change clothes with steel lockers to lock their clothes up in and a good place to wash. They have good drinking water furnished through sanitary drinking fountains on spigots. The owner of this mill is one of the most wonderful men I ever met in more ways than one. His agent and superintendent are men of ability or they couldn't have put up such an ideal plant.

Spinning has filling wind on warp frames and tape drive is used on the spindles.

TEN O. C.

Textile Bulletin

An important factor in the development of the textile industry in this section and throughout the South, is the editor, the firm name being the Clark Publishing Company.

The company also publishes Clark's Directory of Southern Textile Mills.

Publication of the Textile Bulletin was begun in 1911. The paper soon assumed a commanding place in the of textile publications and it is now one of four big textile publications in the country. It does not seek circulation outside of the south, but in the South it has the largest circulation of any newspaper in its field.

The paper has built up on the idea of service to the textile industry. It has worked with the manufacturers on legislative and business matters and has striven to place every phase of the industry on a sound

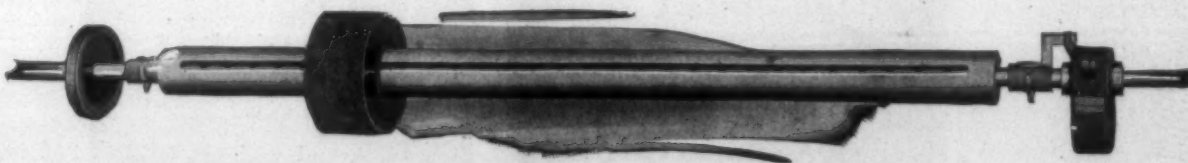
basis. The paper is published weekly at \$2 a year.

Mr. Clark takes an active part in everything relating to the textile industry and is at the present in charge of the exhibit in connection with the meeting of the Southern Wholesale Dry Goods Association here—From The Textile Number of Charlotte Chamber Of Commerce Bulletin.

Information Wanted

As to whereabouts of Mrs. Lydia Hill. Left home April 8, leaving husband and 2 small children. Description: slender, light hair, blue eyes, gold upper front tooth, age 28 years, height about 5 ft. Last seen with tall man about 21 years old at Kings Mountain. Information will be appreciated. F. Robertson Hill, Mt. Holly, N. C. P. O. Box 297.

Textile Grinding Machinery Of All Kinds

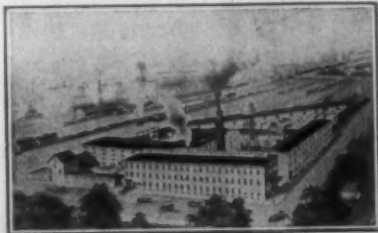


Send in Your Old Grinders to be Repaired

Southern Agent, **E. M. TERRYBERRY, 1126 Healy Bldg., Atlanta, Ga.**

B. S. ROY & SON CO., WORCESTER, MASS.

Established 1868



DAVID M. BROWN
President

GEORGE G. BROWN
Treasurer

THE DAVID BROWN COMPANY

Lawrence, Mass.

All Our Products Made in One Up-to-the-Minute Factory Group

"HIGH GRADE"

Bobbins, Spools and Shuttles

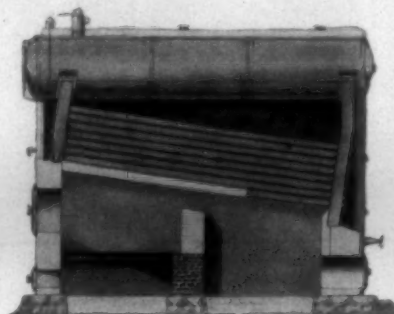
Correspondence Solicited

Catalog on Request

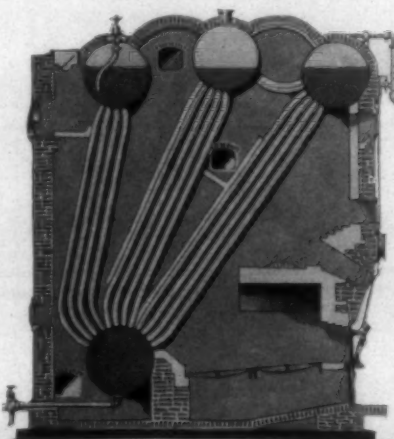
One-Piece Furnace Lining

In these days of keen competition and small profits, manufacturers are impressed with the necessity of cutting costs wherever possible and in operating every department efficiently and economically.

To help put the boiler and furnace



equipment on an economical and efficient basis, the Cornish Company, of Hartsville, S. C., is manufacturing a "One-Piece" Furnace Lining that is designed primarily



to save the cost of repairs on the fire brick furnace linings and to add

to the efficient and constant operation of the boiler plant.

The One-Piece Furnace Lining is in plastic form, used on the inside of furnace in place of fire brick. As its name implies, it is in one solid piece when it hardens in the furnace. It expands uniformly, thus forming a bond that holds in spite of the sudden and frequent variations in temperature to which it is subjected. It is adapted to use in all types of boilers as it can be moulded easily into any shape.

This furnace lining, by reason of its solid construction without joints, has proven very effective in stopping leaks in fire walls. In this manner the manufacturers say, it effects a substantial saving on coal costs, an item of great importance to every user of boiler equipment.

Installations of One-Piece Furnace Linings are made by The Cornish Company at no additional cost to the purchaser.

The Cornish Company claims for its product that it will put an end to costly repairs to fire brick furnace linings, save coal by preventing air flowing from the outside to the inside of the furnace, and materially add to the general efficiency of the furnace equipment. Statements from a number of large manufacturers who are using this furnace lining tend to substantiate the claims of the manufacturers.

In addition to a large number of installations in various other manufacturing plants, the Cornish Company has recently installed its one-piece furnace lining in the following cotton mills: Woodside Cotton Mills, Greenville; Piedmont Cotton Mills, Piedmont, S. C.; Enoree Mills, Enoree, S. C.; Irene Mills, Gaffney, S. C.; Cabarrus Mills, and Cannon Mills, Kannapolis, N. C., and the Holt-Williamson Manufacturing Co., Fayetteville, N. C.

Weavers' Meeting in Spartanburg

(Continued from Page 20)

Lockman, C. H., O-Weaving, Union-Buffalo Mills, Union, S. C.
Lockman, F. D., Supt., Monarch Mills, Lockhart, S. C.
McCombs, J. V., Supt., Union-Buffalo Mills Co., Buffalo, S. C.
Maigatter, C. D., Salesman, Hart Products Corp., Charlotte, N. C.
Miller, Hugh, Spartanburg, S. C.
Moore, P. B., Supt., Conestee Mills, Conestee, S. C.
Moore, W. Y., O-Weaving, Union-Buffalo Mills Co., Buffalo, S. C.
Morgan, G. C., Overseer, Seneca Co., Seneca, S. C.
Neighbors, H. E., Asst. Weaver, Florence Mills, Forest City, N. C.
Ochs, C. H., Jno. P. Marston Co., Boston, Mass.
Ostein, R. T., O-Weaving No. 2, F. W. Poe Mfg. Co., Greenville, S. C.
Padgett, C. M., Supt., Seneca Co., Seneca, S. C.
Padgett, P. A., O-Weaving, Eastside Mfg. Co., Shelby, N. C.
Philip, Robert W., Associate Editor, Cotton, Atlanta, Ga.

Phillips, J. L., Southern Textile Bulletin, Charlotte, N. C.
Poole, D. F., O-Weaving, Dunean Mills, Greenville, S. C.
Poole, J. K., O-Weaving, Whitney Mfg. Co., Whitney, S. C.
Poole, R. W., Service Man, Draper Corp., Atlanta, Ga.
Pratt, W. B., Sou. Agent, Joseph Sykes Bros., Charlotte, N. C.
Pruitt, G. P., Cloth Room, Dunean Mills, Greenville, S. C.
Rakestraw, S. P., Sou. Agent, Seydel Chemical Co., LaGrange, Ga.
Ramsey, T. C., Cloth Room Overseer, Eastside Mfg. Co., Shelby, N. C.
Rice, Elkin D., Salesman, Montgomery & Crawford, Spartanburg, S. C.
Riggins, W. G., O-Weaving, Conestee Mills, Conestee, S. C.
Rogers, H. O., Supt., The Hartwell Mills, Hartwell, Ga.
Rogers, W. J., O-Spinning Room, Marion Mills, Marion, N. C.
Seydel, Paul, Pres., Seydel-Thomas Co., Atlanta, Ga.
Shambow, Jno. C., Pres., Shambow Shuttle Co., Greenville, S. C.
Shull, W. G., Salesman, Greenville, S. C.

Why Weavers Like Them

The workers who tend the looms naturally are critical. Equipment which meets with their approval must pass the acid test.

Weavers like Heddles because they make for steady production. Stoppages owing to the thread breaking are infrequent. Seconds are kept down. Then again these flexible wire heddles are easy to thread. Their use results in a close woven, soft feeling fabric. Heddles are made of steel heat treated. Need we say that replacements are far between?

Let us send you a few samples of Heddles. Try them out in your weave room and see what the "jury" says.



L. S. Watson Mfg. Co.
Leicester, Mass.

RAW STOCK DYEING

We Specialize on Fast Colors
We reclaim burnt and damaged cotton
Prompt Service

SANDERS, SMITH & CO.
Charlotte, N. C.

SOUTHERN DISTRIBUTING COMPANY

50 Market Street, Charleston, S. C.
Griffin, Ga. Greenville, S. C. Charlotte, N. C.
Manufacturers and Distributors
—of—
Stauss Rectified Tallow, Oil and Gums for all-warp sizing and finishing purposes

DIXON LUBRICATING SADDLE CO.

BRISTOL, RHODE ISLAND



Use Dixon Patent Stirrup Adjusting Saddles, the latest invention in Saddles for Top Rolls of Spinning Machines. Manufacturers of all kinds of Saddles, Stirrups and Levers.

WRITE FOR SAMPLES

KNOXALL ROLLER CLOTH

(Virgin Wool)

Edward H. Best & Company

222 Purchase St.
Boston, Mass.

BOBBINS-SPOOLS SKEWERS-TUBES-ROLLS

Manufacturers and Enamellers



WALTER L. PARKER CO.
LOWELL, MASS.

For Service and Prompt Attention Write Us

Page Super Heavy Zinc Coat



Here's positive protection for your property at less cost per year than ever before.

The Page Galvanized-after-weaving process covers Page Fabric with a uniform protective coat of zinc **five** times heavier than ordinary fencing—the last word in economical property protection.

Fence this year. Ask for plans and estimates on Page Protection Fence. We are equipped to give prompt, efficient service in erection.



GENERAL EQUIPMENT COMPANY

Charlotte, N. C.

Sibley, W. A. L., Apprentice, Whitney Mfg. Co., Whitney, S. C.
Silver, G. A., Dyer, Haynes Mill, Avondale, N. C.
Simpson, R. C., O-Weaving, Brookford Mill, Hickory, N. C.
Sloan, S. M., Sou. Rep., American Supply Co., Greenville, S. C.
Smart, M. G., Night Weaver, Florence Mills, Forest City, N. C.
Smith, H. G., O-Weaving, Beaumont Mfg. Co., Spartanburg, S. C.
Smith, Howard L., Salesman, Draper Corp., Atlanta, Ga.
Smith, N. T., Second Hand Weaving, Woodruff Cotton Mill, Woodruff, S. C.
Smith, P. A., Supt., Cotton. Dept., Pacific Mills, Wellford, S. C.
Snoddy, John M., O-Carding, Marion Mfg. Co., Marion, N. C.
Spake, J. O., Supt., Easley Cotton Mill No. 3, Liberty, S. C.
Steadman, A. D., Supt., Jackson Mill, Wellford, S. C.
Summey, S. P., Supt., Alexander Mfg. Co., Forest City, N. C.
Thackston, H. A., O-Weaving, East Side Mill, Shelby, N. C.
Thomas, H. W., Weaver, Oakland Cotton Mills, Newberry, S. C.
Thomas, S. C., Seydel-Thomas Co., Spartanburg, S. C.
Thomason, F. L., Rep., N. Y. & N. J. Lubricant Co., Greenville, S. C.
Thomason, Lewis W., N. Y. & N. J. Lubricant Co., Charlotte, N. C.
Thompson, J. T., Spinner, Oakland Cotton Mills, Newberry, S. C.
Thompson, W. H., Cloth Room, Courtenay Mfg. Co., Newry, S. C.
Tidwell, J. S., O-Weaving, Springstein Mills, Chester, S. C.
Toms, J. P., Supt., Eastside Mfg. Co., Shelby, N. C.
Van Sandt, Harold, Salesman, Corn Products Sales Co., Greenville, S. C.
Veal, W. W., O-Weaving, Arcadia Mills, Arcadia, S. C.
Waits, E. G., Carder, Oakland Cotton Mills, Newberry, S. C.
Warren, C. H., Draper Corp., Atlanta, Ga.
West, Jack, Salesman, Carolina Supply Co., Greenville, S. C.
White, H. B., O-Weaving, D. E. Converse Co., Glendale, S. C.
White, Jno. R., Mgr., Corn Products Sales Co., Greenville, S. C.
Wilkins, J. R., O-Weaving, Pacolet Mfg. Co. No. 5, Trough, S. C.
Williams, A. R., O-Weaving, Hartwell Mills, Hartwell, S. C.
Williams, C. L., Service Man, Draper Corp., Atlanta, Ga.
Williams, D. W., Overseer Weaving, Pacolet Mill No. 3, Trough, S. C.
Witherspoon, George, Prop., Spartan Sizing Comp. Co., Spartanburg, S. C.
Wofford, J. A., O-Weaving, Baldwin Mills, Chester, S. C.
Wofford, J. L., Asst. Supt. and O-Weaver, Lydia Mill, Clinton, S. C.
Wood, H. H., Service, Steel Heddle Mfg. Co. Co., Greenville, S. C.
Wooten, J. A., O-Weaving, Manetta Mills, Lando, S. C.

Improved Opening Machinery.

(Continued from Page 16)
exhaust fans for drawing cotton from a distance, placed on each side of a central beater, to whose action the cotton is subjected in its passage from the exhaust tubing to the

Safety

Safety guards for machinery are not more necessary than protecting your floors from slipperiness—a common form of accident in the mill.

And no safety guard ever provided better protection to a machine than the cleaner

WYANDOTTE DETERGENT

provides to your floors.

How else could you explain the fact that many of its users have removed their warning cards against accidents from slipping.

And the cost is so low that it is the most inexpensive accident insurance you can buy.

Ask your supply man



The J. B. FORD CO., Sole Mfrs.
Wyandotte, Michigan

Textile Mill Floors Scrubbing Powder



Mi Cleanser—The Perfect-ed, Non - Soluble, Cleaning, Polishing, Cleansing, Deodorizing, Scouring and Scrubbing Powder.

Six-in-one.

YOU TRY IT. THANKS.

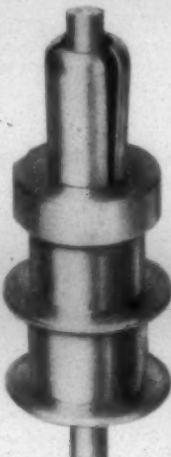
CHARLIE NICHOLS
Pres., Treas. & Genl. Mgr.
NICHOLS MFG. COMPANY
Asheville, N. C., U. S. A.

Fournier & Lemoine

Manufacturers of Patented
CLUTCH SPINDLES

for use on

Spinning and Twister Frames
and Quiller Collars



All Kinds of
Spindles
Repaired

A few of the advantages of our Patented Clutch on twister spindles are:

The elimination of slack twist by the bobbin rising on top of driver; more uniform filled bobbins; doing away with Knee Breaks; cutting down bobbin expense 50 per cent.

Fournier & Lemoine
Linwood, Mass.

WELL DRILLING AND DEEP WELL PUMPS

We do the engineering, and have had 32 years experience solving water problems satisfactorily for textile mills.

Sydor Pump & Well Co., Inc.
Richmond, Va.

Joseph L. Davidson Co.

Established 1889

Designing Card Stamping Repeating
FOR ALL TEXTILE FABRICS

2525 N. Second St., Philadelphia, Pa.

Save in freight by using

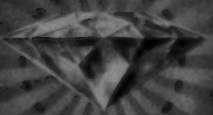
W I L T S

Veneer Packing Cases

They are lighter and stronger, made of perfect 3-ply Veneer Packing Case Shooks. A saving of 20 to 80 pounds in freight on every shipment because of extreme lightness. Stronger than inch boards, burglarproof, waterproof and clean. Write for prices and samples. Convincing prices—Quick service. Wilts Veneer Co., Richmond, Va.

SPINNING RING SPECIALISTS FOR MORE THAN FIFTY YEARS

SPINNING RINGS
TWISTER RINGS
SILK RINGS



DIAMOND FINISH
TRAVELLER CLEANERS
TRAVELLER CUPS
GUIDE WIRE SETS

WHITINSVILLE
SPINNING RING CO.
WHITINSVILLE, MASS.

cages. Between the fan and beater is a regulating disc to control the amount of cotton to be passed to each of the two side fans so that any irregularities in the lap, when the opener is used in conjunction with a lap-forming apparatus, can be remedied by adjusting these discs. The arrangement of a fan and disc on each side of the opener greatly contributes to the equal distribution of cotton over the width of the machine. Over the circular casing, surrounding the upper portion of the beater, an air valve is provided to automatically close the communication between the trunks and the opener and to admit external air to the machine when the latter stops for a full lap. This arrangement prevents an accumulation of cotton taking place at the cages, obviating consequent thick places being formed in the succeeding lap.

Safety Beater Lock.

In order to lessen the number of accidents and in keeping with the policy of many mills to reduce the chances of accident to the minimum the H. & B. American Machine Company has designed a safety heater lock which is positive in action and which is fool proof.

This lock is designed so that it is impossible to start the machine when the beater cover or glass door is open and it is equally impossible to open either of these before locking the machine. This device is simple of construction and very durable and has been approved and recommended by insurance companies. It can be easily applied to old machines by the mill machinist.

Cotton Used in April

Washington, May 14.—Cotton consumed during April amounted to 480,010 of lint and 41,030 of linters consumed during March this year and 576,514 of lint and 52,595 of linters in April last year, the census bureau announced today.

Cotton on hand April 30 was held as follows:

In consuming establishments 1,328,273 bales of lint and 130,245 of linters compared with 1,498,266 of lint and 126,149 of linters so held on March 31 this year, and 1,878,498 of lint and 179,941 of linters so held on April 30 last year.

In public storage and at compresses, 1,512,086 bales of lint and 83,344 of linters, compared with 1,983,544 of lint and 89,032 of linters so held on March 31 this year, and 1,935,714 of lint and 53,807 of linters so held on April totalled 40,436 bales, compared with 49,832 in March this and 37,271 in April last year.

Exports during April totalled 320,774 bales, including 9,561 bales of linters, compared with 332,168 including 17,091 of linters in March this year and 259,984 including 2,769 of linters in last year.

Cotton spindles active during April numbered 31,871,665 compared with 32,392,171 in March this year and 35,512,737 in April last year.

GARLAND

LOOM PICKERS *and*
LOOM HARNESSES



GARLAND MFG. CO., SACO, ME.



Seydel-Thomas Co.

Textile Chemicals
for Best Weaving

Seyco Products

The result of twenty years' study and practice in treatment of Sizing and finishing problems.

Main Office and Plant
35 Glenn St.
Atlanta, Ga.

Branch Office
Room 206 Andrews Law Bldg.
Spartanburg, S. C.

THE GREATEST IMPROVEMENT MADE IN COTTON SPINNING IN QUARTER OF A CENTURY

The Richards-Hinds Light Running Rolls

Over 2,000,000 Spindles Equipped to Date

Guaranteed Claims

Cockley Yarn Preventor
Extra Strength of Yarn
Less Waste
Greater Production

Less Change of Roll Settings
Reduced Cost of Spinning
One-third Saved on Leather Covered Rolls
Better Spinning with Improved Product

All machine builders are agents and will quote prices for new work.
Also for prices and particulars write to

The Metallic Drawing Roll Company

Indian Orchard,

Mass.

Puro Sanitary Drinking Fountains



Southern Representative

E. S. PLAYER
Masonic Building
Greenville, S. C.

are in daily use in hundreds of textile mills.

WHY?

Because they are the most satisfactory fountain on the market.

Connect a PURO to your supply, then proceed to forget about it. Years later PURO will be just as satisfactory as it was the day you installed it.

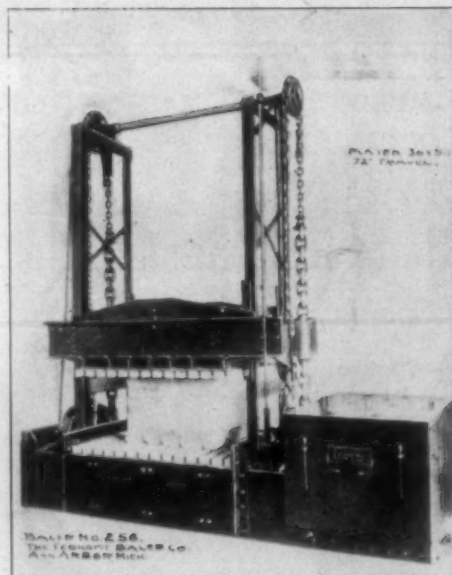
Send for Catalog

Puro Sanitary Drinking Fountain Co.
HAYDENVILLE, MASS.

ALL STEEL
ECONOMY
FIRE PROOF

CLOTH PRESS

HEAVY DUTY NO. 258. PLATEN 50 x 36



This Economy Heavy Duty Cloth Press No. 258, has a platen 50 x 36 inches. Platen travel of 72 inches. Equipped complete with Direct Connected Electric Motor.

Press will develop tremendous pressure, ample for the baling for Export and Domestic shipment of Duck, Khaki, Osnaburghs, Sheetings, Print Cloths, Tickings, Twills, Denims, Drills, Lawns and Shirtings or for compressing ginghams. Requires only about one minute of actual motor operation to make a Bale of Cloth.

Press maintains its maximum pressure indefinitely until released. Unlimited compressing platen stroke. In other words, platen will travel as low as is necessary to completely compress the bale, regardless of the third dimension, as the platen can go down to within four inches of compressing platform. Entirely self contained, requiring no cement foundation, pit,

over head counter-shafting, chain connections, etc. Chains are hand forged Swedish steel. Will stand over 50 per cent over load, a greater load than can be exerted by the motor pulling up to 40 H. P. torque.

Write for any special information.

ECONOMY BALER COMPANY

Dept. S. T.

Ann Arbor, Mich.

Index To Advertisers

Where a — appears opposite a name it indicates that the advertisement does not appear in this issue.

Page	Page
—A—	Link-Belt Co. —
Allis-Chalmers Mfg. Co. 17	Lockwood, Greene & Co. —
American Laundry Machinery Co. —	Lowell Shuttle Co. 25
American Moistening Co. 25	Lupton's Sons Co., David —
American Textile Banding Co. 43	—M—
American Trust Co. —	Macrodi Fibre Co. 24
Amory, Browne & Co. 36	Marston, Jno. P. Co. 37
Anchor Post Iron Works 26	Mathieson Alkali Works 13
Arabol Mfg. Co. —	Mauney Steel Co. 37
Arkansas Cotton 32	Mayview Manor 14
Arnold, Hoffman & Co. 41	Memphis Cotton 34
Ashworth Bros. 42	Merrrow Machine Co. 37
Atlanta Brush Co. —	Metallic Drawing Roll Co. 29
Atlanta Harness & Reed Mfg. Co. 38	Metz, H. A. & Co. —
Atlantic Dyestuff Co. —	Minter Homes Co. —
—B—	Mississippi Cotton 35
Bahnsen Co. —	Moreland Sizing Co. —
Bally, Joshua L. & Co. 36	Morse Chain Co. 21
Bancroft, Jos. & Co. —	Mossberg Pressed Steel Corp. —
Barber-Colman Co. 5	—Mc—
Better Equipment Campaign 6	McCaughy, Edward J. 37
Barber Mfg. Co. —	—N—
Best, Edward H. & Co. 27	National Aniline & Chemical Co. 9
Borne, Scrymser Co. —	National Ring Traveler Co. 41
Bosson & Lane —	Newburger Cotton Co. 34
Brown, David Co. 26	N. Y. & N. J. Lubricant Co. —
Brown-St. Onge Co. —	Nichols Mfg. Co. 28
Butterworth, H. W. & Sons Co. —	North Carolina Cotton 33
—C—	Norwood Engineering Co. 42
Carolina Specialty Co. 38	—O—
Carrier Engineering Corp. —	Oklahoma Cotton 35
Catlin & Co. 37	—P—
Charlotte Manufacturing Co. —	Page Fence & Wire Products Assn. 28
Charlotte Leather Belting Co. 43	Paige, Schofield & Co. —
Chicago Belting Co. —	Parker, Walter L. Co. 28
Chicago Fuse Mfg. Co. —	Parks-Cramer Co. —
Clipper Belt Lacer Co. —	Paulson, Linktroum & Co. 37
Cocker Machine & Foundry Co. 42	Pawtucket Spinning Ring Co. 42
Collins Bros. Machine Co. —	Penick & Ford, Ltd. —
Converse & Co. 36	Perkins, B. F. & Sons —
Cooper-Hewitt Electric Co. —	Puro Sanitary Drinking Fountain Co. 30
Corn Products Refining Co. —	—R—
Courtney, Dana S. Co. —	R. I. Warp Stop Equipment Co. —
Crompton & Knowles Loom Works 36	Rice Dobby Chain Co. 38
Curran & Barry —	Ridley Watts & Co. —
Cyclone Fence Co. —	Robinson, John L. & Co. 34
—D—	Roessler & Hasslacher Chemical Co. 23
Dary Ring Traveler Co. —	Rogers Fibre Co. 10
Davidson, Jos. L. Co. 29	Root Co. —
Dixon Crucible Co. Joseph —	Roy, B. S. & Son 26
Dixon Lubricating Saddle Co. 27	—S—
Drake Corp. 38	Saco-Lowell Shops 3
Draper, E. S. 24	Sanders, Smith & Co. 27
Draper Corp. —	Sayles Finishing Plants —
Dronsfeld Bros. —	Scott, Henry L. & Co. —
Druid Oak Belting Co., Inc. 25	Seaboard Railway —
DuPont de Nemours, E. I. & Co. —	Sellers, Wm. & Co. —
—E—	Seydel-Thomas Co. 29
Economy Baler Co. 30	Serrine, J. E. & Co. —
Emmons Loom Harness Co. 38	Siggers & Siggers 38
Eclipse Textile Devices, Inc. 12	S. K. F. Industries —
Entwistle, T. C. Co. —	Sonneborn, L. Sons —
—F—	Sonoco Products —
Fafnir Bearing Co. —	Southern Distributing Co. 27
Fales & Jenks Machine Co. 31	Southern Railway —
Farish Co. 24	Southern Spindle & Flyer Co. —
Firemen's Mutual Insurance Co. 21	Spinks, John D. —
Ford, J. B. Co. 28	Stafford Co. —
Fournier & Lemoine 29	Steel Heddle Mfg. Co. 23
Franklin Process Co. —	Stein, Hall & Co. —
—G—	Sugar Creek Coal Sales Co. 38
Garland Mfg. Co. 29	Sydnor Pump & Well Co. 29
General Electric Co. —	—T—
Grant Leather Corp. —	Tatum, Pinkham & Greey 36
Graton & Knight Mfg. Co. 41	Terrell Machine Co. —
Greist Mfg. Co. —	Texas Cotton 32
—H—	Textile Mill Supply Co. —
Hepworth, Jno. W. & Co. —	Thomas Grate Car Co. 30
H. & B. American Machine Co. 15	Tolhurst Machine Works —
Hetherington, John & Sons Co. 44	Tripod Paint Co. —
Hollingsworth, J. D. —	—U—
Holcomb Bunch Builders Corp. 16	United Chemical Products Co. 43
Hopedale Mfg. Co. 2	U. S. Bobbin & Shuttle Co. —
Houghton, E. F. & Co. 19	U. S. Ring Traveler Co. 38
Howard Bros. Mfg. Co. 20	Universal Winding Co. 38
Howard-Hickory Co. —	—V—
Hyatt Roller Bearing Co. 11	Victor Ring Traveler Co. —
—J—	Vogel, Joseph A. Co. 43
Jackson, Hill & Co. —	—W—
Johnson, Oliver & Co. —	Watson, L. S. Mfg. Co. 27
Jordan Mfg. Co. —	Wellington, Sears & Co. 36
—K—	Westinghouse Electric & Mfg. Co. —
Kaumagraph Co. —	Whitinsville Spinning Ring Co. 29
Keever Starch Co. 18	Williams, J. H. Co. —
Klauder-Weldon Dyeing Machine Co. 38	Williams, I. B. & Son —
—L—	Wilts Veneer Co. 29
Langley, W. H. & Co. 36	Wolf, Jacques & Co. 24
Ladew, Edward R. Co. —	Woods, T. B. Sons Co. 31
Leslie, Evans & Co. 36	
Lestershire Spool & Mfg. Co. —	

Fire Without Having A Cleaning Period On



For Use with Either Natural, Induced or Forced Draft
FOR DETAILED INFORMATION WRITE

THOMAS GRATE BAR COMPANY
BIRMINGHAM, ALA.

Improved Opening Machinery

(Continued from Page 7)

recognized as one of the most important departments in a cotton mill.

Practical students of cotton yarn manufacturing realize that beating cotton in a picker injures the staple. Therefore, since the introduction of vertical openers, which relieves the amount of cleaning to be done by a lapper, beater speeds have been greatly reduced. It is now rare to find a beater running in an up-to-date mill at the old standard speed of 1,500 R.P.M. for a two-blade beater. It is also clearly understood that an overworked picker cannot turn out even laps. Inasmuch as the lappers are inexpensive compared to the poundage they produce, we do not think a mill should sacrifice evenness on account of the expense of an addition of one or two more lappers. The entire picking equipment for a mill costing a million dollars often costs less than \$15,000.

Many mills now find that by using a Morton distributor and an evenner on their breaker that they can do just as well with two processes of picking as they can with three. The advantage of the doubling on the intermediate picker should not be disregarded and should be offset by evening equipment. In many cases mills can better their picking by using their present picker equipment by going to two-process picking and adding evenners to the breakers, and using a Morton distributor. The extra breakers and finishers required to reduce the production per machine can be made out of their present intermediate pickers. This idea is recommended to mills that cannot economically enlarge their present picker room. The intermediate pickers cannot be done away with, without carefully considering every angle. It is true that two-process picking will show a better breaking strength of yarn.

Whitin Picker Room Machinery

(Continued from Page 10)

cost. We recommend the three-bladed beater because it means the same beating per inch of cotton at a reduced speed—again less injury to the stock. The calendar roll weighting is placed on the inside of the machines, thereby making the pickers easier to clean and giving them a much better appearance. Due to the very excellent Whitin beater-cover lock it is impossible for the operative being injured by trying to stop a beater with his hand—a foolish sounding fact but one that has happened often in the past.

Let us go back for a minute to a more detailed exposition of the Whitin evenner motion. Due to the fact that the cotton passes over the keys of our piano link motion and to the fact that we can bring our keys right up to the feed rolls we believe that we have the most sensitive and efficient evenner motion made.

Let us take up briefly our waste

picking machinery. Our willow is built to handle all kinds of soft waste with undesirable materials therein—such as floor sweepings, card strips, fly, etc. Its production runs from 4,500 to 7,000 pounds per 10-hour day. In this country we have attached when wanted the automatic feed which cuts the old cost of feeding by hand at least 80 per cent, and which means a better and more even feed.

The Whitin hard waste machine, recently brought out, will handle all kinds of hard waste, the number of sections needed depending on the hardness of the waste. We build this machine in one to eight sections. The cylinders are made with $\frac{1}{2}$ -inch boiler plate drums, thereby insuring the maximum safety at all reasonable speeds. The entire machine is built to run with the minimum amount of friction and with the maximum ability to cope with the hardest kind of work.

Greenville's Exhibit At The Southern Exposition

Fred L. Bryant, Chairman of Chamber of Commerce committee in charge of the Greenville section of the Southern Exposition to be held in The Grand Central Palace February 2 to 14, 1925, announces that Greenville firms have applied for approximately 1500 square feet of space. The business interests of Greenville have realized that the prominence of an All Southern show held in New York will attract sufficient attention to give nation-wide advertising and have determined to make Greenville's display a conspicuous one.

All products will be strictly Greenville made. The great variety of cloths made by the local mills will be shown. These will include heavy duck, medium weight goods, fancy mixed silk and cotton dress goods and all-woolen worsteds. Spaces have been taken by the dyeing, Bleaching and Finishing Plants and several textile accessory manufacturers will display their products. Many other firms and organizations with national reputations will be represented.

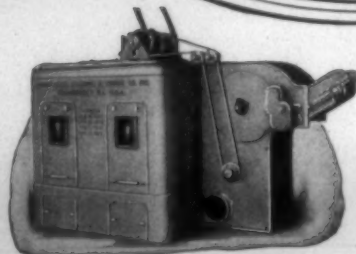
The entire Greenville Section will be under the supervision of the Chamber of Commerce who will show the many advantages offered to new industries. Plans are well advanced to make the annual Acquaintance Tour to New York during the show.

It is also of interest that approximately 60% of the South Carolina space has been applied for.

Lancashire Spindles and Looms.

The number of spindles and looms in Lancashire show a large decrease since 1917, according to a report from Trade Commissioner Hugh D. Butler. The Cotton Spinners' and Manufacturers' Directory lists 57,425,881 spindles on December 31, 1923, a decrease of 1,462,514 since 1917. Details of gains and losses for both spindles and looms in the various manufacturing towns are given in Special Bulletin No. 310, issued by the Textile Division of the Bureau of Foreign and Domestic Commerce.

Complete Equipment Cotton Machinery Built by Specialists



Woonsocket Machine & Press Co., Inc.

Woonsocket, Rhode Island, U. S. A.

Picker and Card Room Machinery

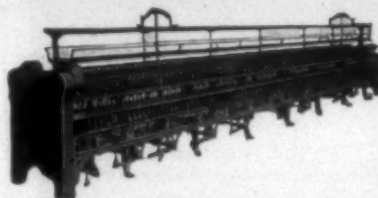
Feeders Conveyers
Vertical Openers Bale Breakers
Breaker Pickers Finisher Pickers
Thread Extractors
Roving Waste Openers
Revolving Top Flat Cards
Drawing Frames, Slubbers
Intermediate, Roving and Jack Frames

Fales & Jenks Machine Company

Pawtucket, Rhode Island, U. S. A.

Ring Spinning and Twisting Machinery

Ring Spinning Frames for Cotton, Ring Twisters for Cotton, Wool, Worsted, Silk, Jute, Flax and Novelty Yarn.



Easton & Burnham Machine Company

Pawtucket, Rhode Island, U. S. A.

Warping and Winding Machinery

Spoolers Doublers
Beam Warpers Banding Machines
Ball Warpers Card Grinders
Skein Winders Spindles for
Reels Cotton and Silk

J. H. Windle, Northern and Export Agent
J. H. Mayes, Southern Agent

Pawtucket, R. I.
Charlotte, N. C.

PULLEYS HANGERS

The WOOD Line

SONS CO.

CLUTCHES

FLANGE OR PLATE COUPLINGS

Designed to withstand severe line-shaft service. Flanged to protect the workman from being caught on the bolt heads or nuts. Machined all over to template, making them interchangeable and therefore easily duplicated.

Interchangeability is a feature that has made

THE WOOD LINE

of Power Transmission Machinery the standard in so many of the country's largest plants.

COUPLINGS

Catalogue on request

T. B. Wood's Sons Co.

CHAMBERSBURG, PA.

MILTON G. SMITH, Sou Sales Agent,
Greenville, S. C.

POWER TRANSMITTING MACHINERY

**P. E. HENSON & CO.**

Cotton
All Grades and Staples
Little Rock, Ark.

A. L. Betts A. M. Williams

HOPE COTTON CO.

Incorporated
Arkansas Cottons
All Grades and Staples
35 Years in the Cotton Business
Hope, Arkansas

W. F. EVANS & CO.

Cotton
In the Heart of the Delta
Mississippi and Arkansas Rivers,
Benders and Staple Cotton
Helena, Ark.

C. H. Crutchfield

E. W. Crutchfield

C. H. Crutchfield & Co.

Established 1909
Benders and Extra Staples
Hope, Arkansas

Anderson Cotton Co.

Cotton Merchants
Delta Character Cotton
Helena, Ark.

COBB COTTON CO.

Cotton
Mississippi Delta Staple
Our Specialty
Helena, Ark.

ARKANSAS COTTON GROWERS' COOPERATIVE ASSOCIATION

Main Office, Little Rock, Arkansas
Shippers of All Kinds of Arkansas, Tennessee and Missouri Cotton
F. L. PAGE, Gen. Mgr. Cotton Department

**LEVERETT & MOORE**

Texas Cotton
A Specialty
All Grades
Hillsboro :- Texas

LAMPE-THOMAS CO., Inc.

Fort Worth, Texas
Cotton Merchants
Texas, Oklahoma, Arkansas Cottons

Lucius Rash, President

I. L. Brin, Vice-President

RASH, BRIN & COMPANY

Incorporated
Cotton Merchants
Members
New York Cotton Exchange, Texas Cotton Ass'n., Dallas Cot. Ex.
Associate Members Liverpool Cotton Exchange
Terrell, Texas Dallas, Texas

R. L. DIXON & BROTHER

1501 1/2 Commerce Street
Dallas, Texas
Buying Agencies all Principal Towns
Texas and Oklahoma

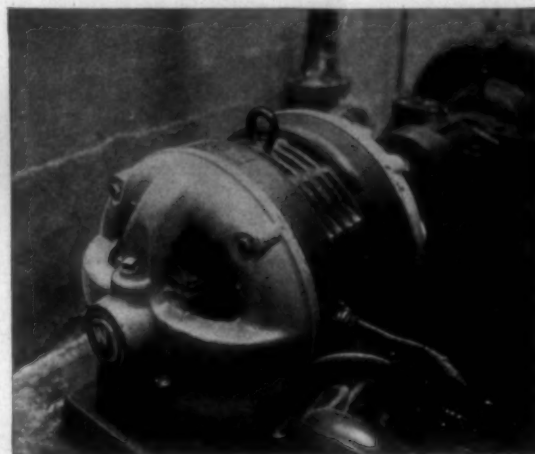
New Leakproof Sleeve Bearing for Electric Motors

A new type of sleeve bearing for electric motors, designed to prevent the leakage of oil into the windings or the entrance of dust and grit into the bearing, has been developed by the Westinghouse Electric and Manufacturing Company. This new bearing, which is known as the Sealed-Sleeve bearing, is so constructed that it is almost air tight,

oil level rose high enough to close the lower cored openings.

For inspection of the oil ring, a large air-tight threaded pipe plug is provided. An enclosed combination filling and overflow opening is placed in the side of the bearing and a rigid cast iron cover is bolted over the oil ring slot and made air tight by an oil proof packing.

Where the shaft passes through the bearing, an improved method of supporting the felt dust-proofing

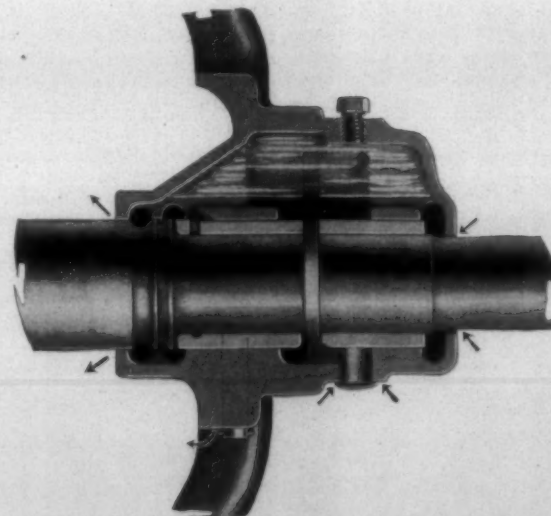


Motor with the new bearing driving a centrifugal pump in a steel mill. Although it has been in service for many months, there is no oil leakage into the motor, the shaft being actually rusty.

preventing air from getting in and washer is used. For the purpose of oil from leaking out.

The principal methods used to improve the conventional bearing are comparatively simple. A connecting passage in the upper part of the bearing housing secures a condition of balanced air pressure in the separate chambers into which the housing is divided by the bearing

lending resilience to the soft felt, the metal cap has a diameter at least one-quarter inch larger than the shaft diameter. This prevents the felt from being compressed close to the shaft, which would cause it to become glazed and hardened and to soon burn and wear out. Since it is left free to expand, it acts like a



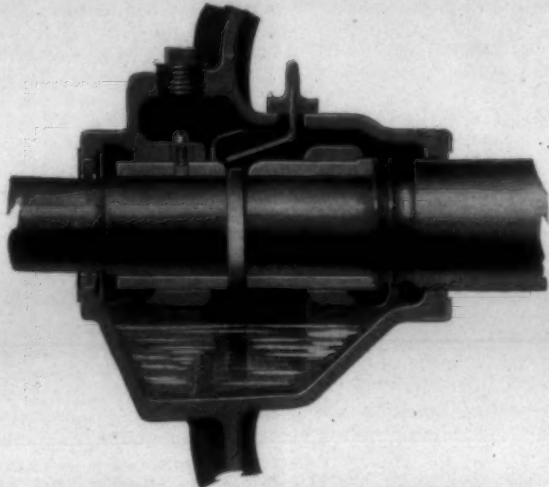
A motor bearing of the conventional design. Note the openings in the housing through which air and dust can enter the bearing, mix with the oil and then be carried into the motor windings.

ing supports. The action of the brush and does not mar or glaze. blower at high speeds sets up a vacuum next to the inside end of the housing and, since it is impossible to seal the housing absolutely at that point because the shaft passes out there, the vacuum is communicated to the space within the housing itself. If the upper passage were not provided, an unbalanced air pressure would result whenever the

The air tight construction of the bearing prevents the passage of air through the bearing and at the same time prevents oil from being drawn into the motor windings. The oil ring, carrying oil from the oil well to the motor shaft, stirs up and churns the oil into a fine spray, which, in the ordinary type of bearing, is sucked into the motor and

covers the windings. The Sealed-Sleeve bearing is sealed so thoroughly that the escape of oil from the bearing is prevented.

The manner in which the bearing is sealed against the entrance of air or dust and prevents the leakage of oil or oily vapor into the motor.



The Sealed-Sleeve motor bearing, showing how effectively this bearing is sealed against the entrance of air or dust and prevents the leakage of oil or oily vapor into the motor.

makes it immune to most conditions of dirt, dust and grit. No gritty substances can enter to mix with the lubricating oil and cause wear of the bearing shell or shaft. Clean oil is always supplied to the bearing and the life of the lubricating oil is determined not by the amount of resultant grounds and short circuits, which frequently result in delays and expensive repairs.

The bearing requires practically no attention and oiling once or twice a year is generally all that is necessary.

Southern Mills Must Add 450,000 H. P. in Ten Years

Washington, May 14.—Cotton mills of the Southeastern States will require additional power equivalent to 450,000 horsepower in the next 10 years, E. A. Yates, general manager of the Alabama Power Co., today told the Senate Committee on Agriculture, which is considering bids for the disposition of Muscle Shoals.

Mr. Yates declared that the normal growth of business of Southern power companies, which have submitted an offer for the Government's hydro-electric and other developments on the Tennessee river, in a decade will exceed all the water power developments possible in that area and will require supplemental electric plants operated by steam.

The power companies propose to link Muscle Shoals in a super-power system with a network of lines throughout the Southeast, Mr. Yates declared.

Speaking of the textile mill situation, the witness further said:

"Alabama, in 1922, grew 835,000 bales of cotton, of which 382,000 bales, or 44.5 per cent, were manufactured into the finished product in that State. With one exception, where a cotton mill in Alabama owned and operated its own individual water power plant, over a period of 10 years, 80 per cent of the cotton spindles in Alabama have discarded isolated steam power for public utility hydro-power.

"In North Carolina, 1922, there were grown 852,000 bales of cotton, while it manufactured into the finished product 1,207,000 bales, or

355,000 bales more than it produced. "South Carolina, in the same year produced 530,000 bales and imported for manufacture into a finished product 393,000 bales more than it produced.

"Louisiana, in 1922, produced 357,000 bales of cotton and manufactured into a finished product only 46,000 bales, or 13 per cent of its production.

"Mississippi, in the same year, produced 1,010,000 bales of cotton and manufactured only 48,000 bales, or 4.8 per cent.

"It is interesting to compare the cotton spindles in these States. In the cotton States having hydro-power, Alabama, in 1922, had 1,300,700 spindles; North Carolina, 5,292,800 spindles, and South Carolina, 5,090,000. In those States without hydro-power, Louisiana had in operation only 103,000 spindles, and Mississippi 172,000 spindles.

"It has been stated that a bale of cotton produced in Mississippi and shipped to another State for conversion into a finished product would leave in Mississippi \$150. If manufactured into a finished product in Mississippi, it would represent in finished product, wage and manufacturing costs in that State approximately \$1,700."

Power Company May Add to Catawba Hill.

Rock Hill, S. C.—That the Southern Power Company plans to make improvements to the Catawba dam, near Rock Hill, at the cost of several million dollars, in the near future, is indicated by information coming from what is considered here as reliable sources.

COTTON

Let Us Quote You

Southeastern Selling Agency

LESSER-GOLDMAN COTTON COMPANY

OF ST. LOUIS, MO.

P. H. PARTRIDGE, Agent, Charlotte, N. C.

Extra staples, and good 1-16 and 1½ cotton from Arkansas, Oklahoma, and Texas, and Memphis territory.

STEWART BROTHERS COTTON COMPANY

(Incorporated)

of New Orleans, La.

COTTON MERCHANTS

Charlotte, N. C.

STAPLES A SPECIALTY

Greenville, S. C.

S. B. TANNER, JR.

Postal Phone

MOREHEAD JONES

Local Phone 821

Long Distance Phone 9998

TANNER & JONES

CHARLOTTE, N. C.

Representing

NEWBURGER COTTON CO.

TARVER, STEELE & COMPANY

Memphis, Tenn.

Dallas, Texas

COOPER & GRIFFIN

(Incorporated)

Cotton

GREENVILLE, S. C.

Local Phone 4480 Postal

L. D. Phone 9991

J. M. WILLIAMS AGENCY

B. B. Jackson, Agent

Cotton Merchants

Charlotte, N. C.

Home Office, Winder, Ga.

William and York Wilson

Incorporated

Cotton Brokers

Rock Hill, S. C.

Representing reliable shippers throughout the cotton belt.

J. EDW. KALE & CO.

Cotton Brokers and Merchants

Extra staples and Short Cotton
Lincolnton, N. C.

GEO. M. ROSE, JR.

Cotton

19 1-2 East Fourth Street
Charlotte, N. C.

SANDERS, ORR & CO.

Cotton

Charlotte, N. C.

J. L. BUSSEY & CO.

Cotton

Greenville, S. C.

H. H. WOLFE & CO.

Cotton

Monroe, N. C.

LINEBERGER BROS.

BROKERS—SHIPPERS

Carolina and Delta Staples
All Kinds Short Cotton

Lincolnton, N. C.



JOSEPH NEWBURGER, President
 D. W. BROOKS, Vice-President
 W. H. WILLEY, Vice-President
 NORMAN MONAGHAN, Secy-Treas.

NEWBURGER COTTON CO.

(INCORPORATED)

MEMPHIS - TENN.

Mississippi Delta Cotton our Specialty

WATSON-WHITE COMPANY

(Incorporated)

Cotton

Offices:

Jackson, Tenn., Memphis, Tenn., Dyersburg, Tenn., Jonesboro, Ark.
 We gin over 15,000 bales of cotton annually, and would ship from gin to mills on type.
 Jackson, Tennessee

TIPTON & COMPANY

Tennessee, Arkansas and
 Mississippi

Cotton

Brownsville, Tenn.

L. W. MAGRUDER & CO.

Cotton

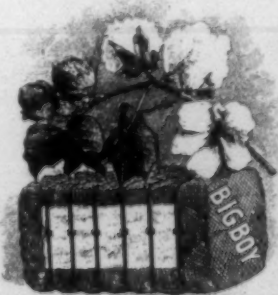
Mississippi, Tennessee and
 Arkansas Staples
 94 South Front St.
 Memphis, Tenn.

CABLE ADDRESS
 BIGBOY
 DOMESTIC

ALABAMA, GEORGIA
 DELTA AND
 WESTERN
 COTTONS

BRAND
 BIGBOY
 EXPORT

John L. Robinson & Co.



Cotton

Home Office

MEMPHIS, TENN., U. S. A.

Codes

Shepperson Codes 78, 81 and 1915
 Meyers 39

BELL and POSTAL
 Long Distance Phones

P. O. Box 521

Buying agencies in the best staple sections in Arkansas, Oklahoma, Texas, Mississippi, Tennessee, Alabama and Georgia. All shipments given careful attention.

Direct selling agency for North and South Carolina and Virginia.

ROBINSON & BAGGETT

Brevard Court

Charlotte,

N. C.

Deterioration of Duck When Waterproofed

(Continued from Page 14)

the pieces were detached from the boards, brought to the laboratory, dried overnight in an electric oven at 54 deg. Cen., and then tested for their comparative water-resistance by the modified funnel test, being rated on a basis of 10. The funnel test was repeated on all pieces from one to three times and the ratings were averaged. Many of the pieces were also tested by the modified spray test.

After the laboratory tests for water-resistance of the exposed samples were completed, the same pieces were used for tensile strength tests by cutting each into five strips, 8 in. long in the warp direction and 1 1/4 in. wide, and then pulling out the warp yarn from both sides of the narrow strips until 46 threads, equivalent to a width of 1 in. in the original canvas, remained. They were then placed in the constant-temperature and humidity room and allowed to condition at 65 per cent relative humidity and 70 deg. Fah. The tensile strength was determined at this condition by means of a standard type of tensile strength tester. The results recorded in the tests are an average of five breaks in every case. The effect of the treatments upon the tensile strength of the exposed duck is expressed as percentage gain or loss, calculated from the tensile strengths of the treated and exposed samples and using the average strength of the exposed untreated samples as the basis of comparison.

With all the treatments which contained pigments other than asphalt or pitch, the tensile strength of the treated canvas after exposure was lower than that of the untreated canvas after exposure, and in many cases the deterioration was great.

This general result differs strikingly from that obtained in previous experiments with yarn, the treated samples of which in most cases showed a greater tensile strength after one year's exposure than did the untreated yarn after exposure. The reasons for this difference are not perfectly clear. Probably, however, the different method of exposure, resulting in subjection of the canvas to much higher temperat-

ures than the yarn, and the different methods of applying the treatments are important factors.

Canvas subjected to treatments consisting of a mixture of 85 per cent mineral wax and 15 per cent of beeswax and that subjected to raw linseed oil treatment showed decided deterioration, being from 63 to 84 per cent weaker than the untreated canvas after exposure. Yellow petrolatum apparently had a greater deteriorating effect than any other material used. When petroleum asphalt was substituted for beeswax a somewhat higher tensile strength was obtained, and as the quantity of asphalt was increased and that of the petrolatum decreased proportionately, the tensile strength increased. When coal-tar pitch was substituted for petroleum asphalt, there was a somewhat greater increase in strength. When lead oleate was substituted for a portion of the amorphous mineral wax, the strength was slightly increased, and the substitution of copper oleate for lead oleate for lead oleate caused a still greater increase in strength.

Dark petrolatum and amorphous mineral wax have practically the same water resistant qualities when 15 per cent of beeswax is mixed with them. Yellow petrolatum which has a lower melting point and less viscosity than dark petrolatum, gave a much lower water resistance rating when mixed with the same amount of beeswax than did the other two petroleum "greases." When an excess of asphalt (75 per cent) was combined with either dark or yellow petrolatum, the water resistance ratings were the same, being increased to 10 in each case. The substitution of 20 per cent of lead oleate for the same amount of amorphous mineral wax increased the water resistance. Neither copper nor calcium oleate (20 per cent) was as effective from a waterproofing standpoint as lead oleate in formulas containing no asphalt. Apparently, there was no difference in water resistance when an excess of asphalt (60 per cent) was used. A noteworthy point in connection with these results is that whenever petroleum asphalt or coal tar pitch was included in the preparations, the water resistance ratings were high. Other experiments have shown that natural refined asphalts give similar results. Of the four materials used alone, beeswax gave the highest water resistance rating, viz., 10.

Pigments, when added to waterproofing treatments which are known to have injurious effects on canvas exposed to the weather ma-

W. J. BRITTON & CO. RIVERS, BENDERS and STAPLE COTTON

105 S. Front St.

Memphis, Tenn, U. S. A.

Established 1896

Incorporated 1923

F. M. CRUMP & CO.

INC.

COTTON MERCHANTS

MEMPHIS, U. S. A.

D. H. CRUMP, President

H. B. POTTS, Vice-President

J. C. WILLIAMSON, Vice-President

A. C. ROBINSON, Sec'y. & Treas.

terially reduce such effects. In fact, many of the pigments used had a preservative effect, the strength of the treated fabric after exposure being greater than that of the untreated canvas after exposure. This effect of pigments in retarding the deterioration of waterproofed canvas exposed to the weather undoubtedly is due to the fact that they form a coating on the surface of the fabric, which tends to shut out the light. A somewhat similar effect is obtained by the use of bituminous materials. This might explain why treatment with preparations containing an excess (over 50 per cent) of asphalt or pitch usually left the canvas stronger after exposure than when it was subjected to other treatments. The fact that the treatments containing coal-tar pitch gave higher results than similar treatments containing petroleum asphalt was probably due to the darker surface coating obtained in the case of the pitch. An inspection of the canvas indicated that the petroleum asphalt, being more completely dissolved, had penetrated the fabric, leaving less color on the surface.

Canvas subjected to the base treatment of petrolatum and beeswax with the addition of various pigments was, after exposure, from 1.7 to 8.3 times as strong as canvas subjected to the base treatment alone. No great significance can be attached to the fact that two samples of apparently the same pigment—in one case dry and in the other case ground in oil—differ with respect to effectiveness in preserving the strength of the treated canvas. Apart from the possible effect of linseed oil, the pigment in two different samples might vary in chemical composition and physical properties.

As a result of adding pigments to the linseed oil treatment, six months exposure caused less reduction in tensile strength of the treated canvas than was shown by exposed canvas treated with the oil alone. This was true in every case, the strength after exposure being from 1.3 to 2.6 times as great as the strength of the canvas treated with boiled linseed oil without pigment.

The addition of pigments to yellow petrolatum and beeswax resulted in increased water resistance ratings. The addition of burnt umber to two preparations containing an excess of asphalt and having very high water resistance ratings did not affect their ratings. The addition of pigments to commercial, boiled linseed oil had the general effect of slightly increasing the water resistance.

Canvas treated with three commercial preparations free from pigments showed marked deterioration in tensile strength and also how water resistance after six months exposure.

All treatments which permitted the canvas to show after exposure a tensile strength of at least 38 kilog. (the strength of the untreated canvas after exposure) and a water resistance rating of 9 or 10 by the funnel test, are considered satisfactory for increasing the service ability of cotton duck for outdoor uses. Since only such preparations as contained

pigments come within this classification, it is probable that the treatments would also be improved by the addition of the same pigments, and that, in general, the use of pigments in waterproofing treatments is beneficial.

When added to linseed oil treatments, pigments have more or less of a stiffening effect, sometimes making the canvas too stiff for purposes which require folding. Zinc oxide had the greatest stiffening effect, and lampblack and aluminium bronzing powder probably had the least.

In commercial waterproofing preparations where there is a choice between light-colored or colorless and dark-colored varieties, the dark colors, such as buff or brown, will probably prove more durable.

Butterworth Southern Plant Now in Operation

After rather extensive interior alterations, the Greenville, S. C., plant of H. W. Butterworth & Sons Co., Philadelphia, has just started to operate.

This place was taken over by the Butterworth organization several months ago. It was formerly operated by the Greenville Foundry and Machine Company. The foundry has been sub-let to the Greenville Steel & Iron Works, who, in addition to operating for themselves, will also make castings for the Butterworth Company. The foundry has a capacity up to 10,000 pounds.

For the present, machine work only will be done in the new Butterworth shop. It has been decided, however, to offer facilities of the shop to Southern manufacturers who might wish to have machine work done here which they cannot do in their own machine shops.

The Butterworth shop has a complete equipment, including shapers, planers, lathes, drill presses and grinding machines, as well as cranes which insure transportation from machine to machine without loss of time. There is also a railroad siding direct to the loading and unloading platform of the shop.

In speaking of the new shop going into operation, J. Ebert Butterworth, treasurer of the company, who is in charge of the Southern office, located in the Woodside building, Greenville, said:

"We feel that we should give to Southern manufacturers every aid which can be given. Along this line, while it is entirely possible that our own work will keep our shop pretty busy, still we will always try to find time to do as promptly and efficiently as possible any work sent to us. We did not in the beginning think of taking in outside work, but the question has been asked of us so many times that we thought it best to throw our entire facilities open to the manufacturers of the South."

"Another question which has been asked of us many times is how soon we will be ready to refill rolls. I would say that about six weeks will be required to put in the large presses. The foundation for these is now being made ready."



HUMPHREY & COMPANY Cotton

Benders and Extra Staples

Established 1894

Greenwood, Miss

Most careful personal attention to shipments of every sale to secure most perfect uniformity of staple and character.

Ask any of our mill customers as to our service.

Branch offices at every Compress point in the Yazoo Mississippi Delta.

G. D. TAYLOR & CO.

Mississippi Delta Staples

Home Office

Memphis, Tennessee

B. F. OLIVER & CO.

Cotton

Staples and Benders

Clarksdale, Miss.

R. C. COLHOUN, JR., & CO.

Cotton

Mississippi Delta Staples a

Specialty

Yazoo City, Miss.

S. L. DODSON & CO.

Cotton Merchants

Domestic—Export

BENDERS AND STAPLES

Main Office: Clarksdale, Miss.

H. Chassaniol

CHASSANIOL & CO.

High Grade Staple Cotton

Experienced Handlers of Low Grade

Staples

GREENWOOD, MISSISSIPPI

Domestic—COTTON—Export

J. F. RODGERS & CO.

CLARKSDALE, MISS.

Merchants and Shippers

Cable Address "Rodchurch"



(Unincorporated)

R. O. HARVEY & COMPANY COTTON

Buyers and Exporters

Members Texas Cotton Association, New Orleans Cotton Exchange

Codes: Meyers' 39th Edition, Shepperson's 1878-1881

Wichita Falls, Texas

Texas, Oklahoma and Kansas

T. J. CHAMBLESS

Cotton

All Grades Oklahoma Cotton

Member Okla. State Cotton Exchange

Ada, Oklahoma

OKLAHOMA COTTON GROWERS ASSOCIATION

A Co-operative Marketing Association for the Benefit of Its 55,000 Cotton Grower Members

Cotton Classed and Sold in Even Grades and Staple

Oklahoma City, Okla.

SELLING AGENTS for SOUTHERN COTTON GOODS

CONVERSE & COMPANY

Frederick K. Rupprecht, President

Established in New York 1872

Selling Agents for the following Southern Mills:

Caraleigh Mills Co.,
Raleigh, N. C.
Neuse Mfg. Co.,
Neuse, N. C.
Peerless Cotton Mills,
Thomaston, Ga.
Guadalupe Valley Cotton Mills,
Cuero, Texas.

Virginia Cotton Mills,
Swepsonville, N. C.
Postex Cotton Mills,
Post, Texas.
Gonzales Cotton Mills Co.,
Gonzales, Texas.
Great Falls Manufacturing Co.,
Rockingham, N. C.

Sand Springs Cotton Mill Corp.,
Sand Springs, Okla.

Also for the

CONSOLIDATED TEXTILE CORPORATION

88 Worth Street

New York City

Leslie, Evans & Company

61 Leonard Street

New York

Selling Agents for Southern Mills

Sheetings, Print Cloth, Drills, Twills, Ducks

W. H. LANGLEY & CO.

COMMISSION MERCHANTS

57 Worth St.

New York

Sole Selling Agents For

Langley Mills, Seminole Mills, Aiken Mills, Anderson Cotton Mills,
Strickland Cotton Mills, Moultrie Cotton Mills, Poulan Cotton Mills,
Royal Cotton Mills

TATUM, PINKHAM & GREEY

40 Leonard Street

New York

Bleached, Grey and Colored Cotton Goods

Joshua L. Baily & Co.

Selling Agents for Cotton Mills

10 and 12 Thomas St.

New York

Wellington, Sears & Company

93 Franklin St., Boston

66 Third St., New York

Philadelphia Chicago St. Louis Atlanta New Orleans San Francisco

Amory, Browne & Co.

Specializing in Selling Cotton Mill Products

BOSTON, 48 Franklin St.

62 Worth St., NEW YORK

Our Export Department Serves 69 Foreign Countries

CURRAN & BARRY

320 Broadway

New York, N. Y.

Cotton Goods

New York.—Prices were somewhat firmer on the unfinished lines of cotton goods last week, having strengthened some in keeping with the stronger cotton markets. Finished goods, however, continued weak, with prices showing much irregularity. There was practically no contract business placed, almost all sales being made of small lots to fill in with. Curtailment of production showed a further increase for the week.

Several lots of styled goods sold at concessions from opening prices, both in first and second hands. Business in staple domestics was slow, with neither jobbers or wholesalers showing a disposition to buy in anticipation of their fall requirements. Gingham showed little change for the week, especially for staple lines. Bleached cottons sold in small quantities only. Trading in wide sheetings, sheets and pillow cases was quiet. Colored goods in almost all styles were quiet.

Trading in print cloths and sheetings showed some improvement on Friday and Saturday. Many mills refused to take business for future deliveries at prices at which they sold spots. Sales of print cloths amounting to 10,000 pieces or more for delivery in June and July were reported at 8% cents, and a number of sales at similar prices were declined by mills. Some business in narrow cloths was reported on the basis of 6% cents for 27-inch 64x60s.

Sales of sheetings were not as large as print cloth sales and mills were firmer in their price ideas and turned down considerable business at the prices bid.

Some new business in English broadcloths was done for June delivery, but the domestic price on the low counts has been moved up to 22½ cents.

There is variation in some of the prices heard on sheetings. For instance, one report tells that some 37-inch, 48 squares, 4.00 yard sold at 10¼ net. Other reports tell of 10% net, and some that one-sixteenth less had been paid. So for the 56x60, 4.00 yard, 11 net is reported, but several want one-quarter more when the quantity is under 100,000 yards or so. There are reports of some continued interest in 6.15 yard, but the buyers want to buy at a little under the market. The quotation is 7¼ net, and a few state they had been unable to do one-

eighth less for a fair-sized quantity, either nearby or later.

It has been difficult to arouse any appreciable interest in cotton duck this week though buyers have the same opportunities for economical purchases they have had for several weeks past. Buyers claim considerable difficulty in finding wide and sail duck under 40 and 5 per cent off. First hands, however, have some unwanted constructions at 45 per cent off. Some clearance army duck in heavier weights have been sold for 47½ cents, no freight. For 8 and 8.42-ounce goods 50 cents would represent a low price, freight paid. Enameling duck has been quoted lower on assured business with 4½ cents basis for 72-inch heavier weights.

In analyzing the tire and automobile industry for the first quarter of 1924 as compared with the same period in 1923 a leading fabric official arrived at these conclusions: 1924 tire production, 13,235,544; in 1923, 12,658,983; 1924 shipments, 11,594,784; 1923, 11,683,641; 1924 equipment, 4,206,000; 1923, 4,002,191; 1924 replacement, 7,388,784; 1923, 7,681,450, or 4 per cent increase. Old cars in use January 1, 1924, 12,281,412; January 1, 1923, 9,275,246, or an increase of 32 per cent. Inventories on March 31, 1924, 6,134,000; same date 1923, 5,700,000, or 7.6 per cent increase in 1924.

Cotton goods prices were quoted as follows:

Print cloths, 28-in., 64x60s	6%
Print cloths, 27-in., 64x60s	6%
Gray goods, 38½-in., 64x64s	9%
Gray goods, 39-in., 68x72s	10%
Gray goods, 39-in., 80x80s	13½%
Brown sheetings, 3-yard	14%
Brown sheetings, 4-yard	12%
Brown sheetings, stand.	15%
Ticking, 8-ounce	26%
Denims	24½%
Staple gingham	15%
Kid finished cambrics	9½a10½
Dress gingham	18½a21
Standard prints	9%

Japanese Silk Cocoon Production.

The cocoon production of Japan for 1923 amounted to 6,685,789 koku (koku equals 5.42 bushel), valued at 669,347,191 yen (yen equals \$0.3992 at current exchange), according to a report issued by a Japanese bank, based on figures collected from local authorities and local raw silk associations.

B W C

TRADE MARK

WARP TYING MACHINES HAND KNOTTERS
WARP DRAWING MACHINES
AUTOMATIC SPOOLERS HIGH SPEED WARPERS

BARBER-COLMAN COMPANY

BOSTON, MASS. GREENVILLE, S.C.

MAIN OFFICE AND FACTORY:

ROCKFORD, ILL. U.S.A.

The Yarn Market

Philadelphia, Pa.—The yarn market showed very little change last week. The higher cotton markets exerted an influence toward higher prices, but the lack of demand offset this tendency. The range of prices for the whole yarn list showed practically no change from last week's prices. While there was a small amount of buying of the coarse counts of carded yarns during the week, the total amount of yarns sold was small. Combed yarns were dull, especially in the finer counts, which are even less active than the coarser numbers. Business on the whole was confined to hand-to-mouth buying, there being practically no contract business of importance.

Curtailment of production has shown a slight increase in the South in the past ten days and there are reports here that more mills will go on short time within the next week or so.

Dealers handling spot lots continued to shade prices, making small sales at prices considerably lower than the mills would accept. Mill prices have held up well in the face of poor demand. There is a growing opinion here that the yarn market is gradually becoming stronger, due to the influence of curtailment. Stocks are not regarded as large and it is hoped that the market will soon work itself to a basis where buyers and sellers can find a price that will lead to more active trading.

Concerning yarn stocks in dealers' or spinners' possession, reports are still unchanged as to such supplies being much smaller than could be regarded as burdensome, even taking into consideration that demand by consumers is so far below normal. When spinners or dealers have substantial stocks, period of dullness generally brings to light many reliable indications of the existence of such stocks. These signs are not in evidence at present.

Yarn prices in this market were published as follows, although these quotations generally are below mill prices:

Two-Ply Chain Warps.			
2-ply 8s.....	42 a	2-ply 24s.....	48 1/2 a 49 1/2
10s.....	43 a 44	2-ply 26s.....	50 1/2 a 51
12s to 14s.....	44 a 45	2-ply 30s.....	52 a
2-ply 16s.....	46 a	2-ply 40s.....	61 a
2-ply 20s.....	46 1/2 a 47	2-ply 50s.....	72 a
Two-Ply Skeins.			
8s.....	42 a	40s.....	59 a
10s to 12s.....	42 1/2 a 43 1/2	40s ex.....	64 a 65
14s.....	44 a	50s.....	72 a
16s.....	45 a 46	60s.....	80 a 81
20s.....	46 a	Tinger Carpet.....	
24s.....	48 a 48 1/2	3, 4-ply.....	38 a
26s.....	49 a 50	White Carpet.....	
30s.....	51 a 51 1/2	3, 4-ply.....	41 a
Part Waste Insulating Yarn.			
6s, 1-ply.....	36 a	12s, 2-ply.....	40 a 41
8s, 2, 3 and.....		20s, 2-ply.....	45 1/2 a 46
4-ply.....	36 1/2 a	26s, 2-ply.....	49 1/2 a 50
10s, 1-ply and.....		30s, 2-ply.....	51 a 51 1/2
2-ply.....	38 a		

Single Chain Warps.			
10s.....	43 a	24s.....	48 a
12s.....	44 a	26s.....	50 a
14s.....	44 1/2 a	30s.....	52 a 53
16s.....	45 a	40s.....	61 a
20s.....	46 a		
Single Skeins.			
6s to 8s.....	41 1/2 a	20s.....	45 1/2 a 46
10s.....	42 a	24s.....	48 a
12s.....	43 a	26s.....	49 1/2 a
14s.....	43 1/2 a	30s.....	51 a 52
16s.....	44 a		
Frame Cones.			
8s.....	41 a	22s.....	45 1/2 a 46
10s.....	41 1/2 a	24s.....	46 1/2 a
12s.....	42 a	26s.....	47 a
14s.....	42 1/2 a 43	28s.....	48 a
16s.....	43 1/2 a 44	30s.....	49 a 51
18s.....	44 1/2 a	30s ty'g in.....	48 a 49
20s.....	45 a	40s.....	58 1/2 a 59 1/2
Combed Peeler Skeins Etc.			
2-ply 16s.....	60 a	2-ply 50s.....	78 a
2-ply 20s.....	63 a	2-ply 60s.....	80 a 83
2-ply 30s.....	66 a	2-ply 70s.....	98 a
2-ply 36s.....	68 a	2-ply 80s.....	112 a
2-ply 40s.....	70 a 72		
Combed Peeler Cones.			
10s.....	50 a 51	30s.....	63 a 65
12s.....	51 a 52	32s.....	63 a 65
14s.....	52 a 53	34s.....	65 a 67
16s.....	53 a 54	36s.....	70 a 71
18s.....	54 a 55	38s.....	70 1/2 a 71 1/2
20s.....	55 a	40s.....	71 a 72
22s.....	55 a 56	50s.....	78 a 80
24s.....	56 a 56 1/2	60s.....	85 a
26s.....	56 1/2 a 57	70s.....	100 a
28s.....	57 a 58	80s.....	110 a
Carded Peeler Thread Twist Skeins.			
20s, 2-ply.....	54 a	36s, 2-ply.....	64 a
22s, 2-ply.....	55 a	40s, 2-ply.....	65 a
24s, 2-ply.....	57 a	45s, 2-ply.....	73 a
30s, 2-ply.....	59 a	50s, 2-ply.....	78 a
Carded Cones.			
10s.....	46 a	22s.....	52 a
12s.....	47 a	26s.....	55 a
14s.....	48 a	28s.....	56 a
20s.....	51 a	30s.....	58 a

Barbados Shirt Market.

There are about 80,000 adult males in the Barbados consular district and cheap negligee shirts, including work shirts, are readily salable there. During the war the United States gained control of this market, although during the last three years British manufacturers have regained the leading position. Consul Watson at Bridgetown believes that American shirts could still be sold by vigorous salesmanship. Wholesale prices of shirts now on sale vary from \$7.50 to \$14.90 per dozen. It would be necessary in order to enter the market to proceed with great tact and courtesy since during the war some American salesmen created a bad impression by their methods of doing business.

Alexandria Cotton Goods Stocks.

On January 31, there was in the bonded warehouses of Alexandria a stock of cotton goods amounting to 6,720 bales and cases. The stock on February 29 showed an increase and amounted to 7,882 bales and cases. On March 31 the stock had decreased to 7,767 bales and cases. Of the aforementioned totals, the stock of Manchester goods amounted to 2,821 bales and 379 cases on January 31; 3,224 bales and 491 cases on February 29; and 3,198 bales and 405 cases on March 31.

Paulson, Linkroum & Co., Inc.

52 Leonard Street, NEW YORK CITY, U. S. A.

COTTON YARNS

Philadelphia

Providence

Chicago

Charlotte

CATLIN & COMPANY

NEW YORK

BOSTON

PHILADELPHIA

CHICAGO

Commission Merchants

Cotton Cloth and Cotton Yarn

SOUTHERN OFFICE

910-11 Commercial Bank Bldg.

CHARLOTTE, N. C.

Gum Trogaso Agglutinates

the fibres of the yarn—cotton, woolen or worsted whichever it may be—and prevents waste of good materials by eliminating flyings.

Gum Tragasol is Cheaper

than either wool or cotton, therefore, its use is a distinct economy.

JOHN P. MARSTON COMPANY

247 Atlantic Avenue, Boston

D. H. Mauney, Pres. Phil S. Steel, Vice-Pres. Frank W. Felsburg, 2nd V.-Pres.
J. S. P. Carpenter, Treasurer D. A. Rudisill, Secretary

Mauney-Steel Company

COTTON YARNS

DIRECT FROM SPINNERS TO CONSUMER

237 Chestnut Street.

Philadelphia, Pa.

Eastern Office, 336 Grosvenor Bldg., Providence, R. I.

Southern Office: Cherryville, N. C.

MILLS DESIRING DIRECT REPRESENTATION AND HAVE THEIR PRODUCT SOLD UNDER THEIR OWN MILL NAME WILL PLEASE COMMUNICATE.

M E R R O W I N G

Established 1838

FOR

Stocking Welting
Toe Closing
Mock Seaming

Maximum Production
Minimum Cost of Upkeep
Unexcelled Quality of Work

THE MERROW MACHINE COMPANY

20 Laurel Street, Hartford, Conn.

COTTON YARNS

All Numbers, Regular, Reverse and Fancy Twists.

Mills wishing to sell direct to discriminating customers please write, stating counts and quality, carded or combed, skeins, ball or chain warps, tubes or cones.

Sales to customers by wire on mill's acceptance and approval

Edward J. McCaughey

YARN BROKER

51 Arlington St., Pawtucket, R. I.

DIRECT MILL AGENT

PAIGE, SCHOOLFIELD & CO., INC.

CARDED AND COMBED COTTON YARNS

SOLE REPRESENTATIVES

Mandeville Mills, Carrollton, Ga.

Audrey Spinning Mills, Inc., Weldon, N. C.

White Hall Yarn Mills, White Hall, Ga.

Chatham Mfg. Co. (Cotton Dept.), Elkin, N. C.

Singles and Plies—Right and Reverse Twists

Cable Cords—Ratines and Colors

1 Madison Ave., New York City

PHILADELPHIA

PROVIDENCE

Want Department

Desire Purchase

One combed yarn mill ten to forty thousand spindles, equipped to manufacture from 30's to 70's yarns.

One colored goods mill with eight to fifteen thousand spindles, conveniently located to large stream of water.

Address Box 577, McComb, Miss.

Position Wanted

Position as overseer weaving or designer. Thoroughly practical and good technical education. Have handled all grades of fancy dress goods, shirtings, etc. Both Dobby and Jacquard weaves. Good references and can come on short notice. Box No. 22-A, care Textile Bulletin.

For Sale

1—Model K Barber-Colman Tying in Machine, nearly new.

2—78" Reed Space Modified D Draper Looms, new.

10—Lowell Cards, good condition.

3—New Deep Well Pumps with motors.

**Textile Machinery
Exchange**

Box 1355 Charlotte, N. C.

MAKE YOUR WANTS KNOWN

Through The
Bulletin Want Department
Read in More than 95% of the
Southern Textile Mills
Rate: \$1.50 per inch per insertion

PATENTS

Trade Marks and Copyrights

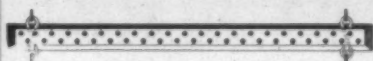
Difficult and rejected cases specially solicited. No misleading inducements made to secure business. Over thirty years active practice. Experienced, personal, conscientious service. Write for terms. Address

SIGGERS & SIGGERS

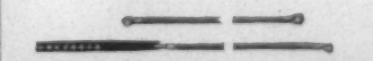
Patent Lawyers

Suite 34 N. U. Washington, D. C.

Improved Dobby Chain



Dobby Cords



Rice Dobby Chain Co.
Millbury, Mass.

Send Us Your Order Today

COMPLETE DYEHOUSE EQUIPMENT

Special Machinery for
Textile Mills
The Klauder-Weldon Dyeing
Machine Co.
Bethayres, Pa.

ECONOMY COAL

STEAM and DOMESTIC COALS

FROM OUR OWN MINES

New River and Pocahontas

High Volatile Splint and Gas

Sugar Creek Coal Sales Company

Richmond, Va.

Mt. Hope, W. Va.

EMMONS LOOM HARNESS COMPANY

The Largest Manufacturers of Loom Harness and Reeds in America

Loom Harness and Reeds

Slasher and Striking Combs, Warps and Leice Reeds,
Beamer and Dresser Hecks, Mending Eyes, Jacquard
Heddles

LAWRENCE, MASS.

UNIVERSAL WINDING CO. BOSTON, MASS.

Manufacturers of Textile Winding Machinery

Winding machines for single and ply yarns,
cotton, woolen, worsted and silk. Write for
circular describing the NEW WIND DOUBLER,
also the No. 80 for winding SUPERCONES.

CHARLOTTE OFFICE **FACTORY OFFICE**
804 Realty Building
FREDERICK JACKSON **PROVIDENCE, R. I.**

—Agents—

Bobbins, Spools, Skewers, Shuttles

We represent first-class manufacturers
on SHUTTLES, BOBBINS, SPOOLS,
SKEWERS, SCAVENGER ROLLS and
TOP FLATS, and have attractive prices.

Carolina Specialty Company

Agents in the Carolinas

Charlotte, N. C.



Ring Traveler Specialists

U. S. Ring Traveler Co.

159 Aborn Street, PROVIDENCE, R. I.

ANTONIO SPENCER, President AMOS M. BOWEN, Treasurer

WM. P. VAUGHAN, Southern Representative

P. O. Box 792 GREENVILLE, S. C.

U. S. Ring Travelers are uniformly tempered which
insures even-running spinning. They are also cor-
rect as to weight and circles. Quality guaranteed.

DRAKE CORPORATION

*"Warp Dressing Service
Improves Weaving"*

NORFOLK . . VIRGINIA

EMPLOYMENT BUREAU

The fee for joining our employment bureau for three months is \$2.00, which will also cover the cost of carrying a small advertisement for one month.

If the applicant is a subscriber to the Southern Textile Bulletin and his subscription is paid up to the date of his joining the employment bureau the above fee is only \$1.00.

During the three months' membership we send the applicant notices of all vacancies in the position which he desires.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern textile industry.

WANT position as superintendent or will take place as overseer, carding spinning or weaving, prefer weaving. Now employed in good North Carolina mill, but wish to change for better place. Best of references. No. 4135.

WANT position as overseer carding in good sized room. Prefer Georgia or Alabama. Eighteen years as overseer in good mills. Now overseer in large mill but have good reasons for wishing to change. Age 45, have family, have good textile education and can run the job. No. 4136.

OVERSEER carding, now employed, wishes to make change. My experience and training fit me to handle large job in good mill. Good manager of help, first-class references as to character and ability. No. 4137.

WANT position as superintendent yarn mill of 10,000 to 15,000 spindles. Age 46, married, long practical experience, 12 years as superintendent. Now employed but have good reasons for making change. References. No. 4138.

WANT position as slasher tender or second hand in spinning. Well qualified for either place. Best of references. No. 4139.

WANT position as roller coverer. Am expert in roller covering and can demonstrate my ability in short time. Now employed in good mill. Want to correspond with mill needing man of unusual ability. No. 4140.

WANT position as overseer of carding. Long experience in handling a combination of both rooms and can get excellent results. Good references. No. 4148.

WANT position as electrician with good mill or some other manufacturing plant. Have had 15 years' experience. Can furnish excellent references. No. 4149.

WANT position as superintendent or would accept place as carder or spinner. Practical man of long experience as both superintendent and overseer. Best of references. No. 4150.

WANT position as overseer carding or spinning, or master mechanic and electrician. Employed at present but have good reasons for making a change. Can come on ten days' notice. First-class references. No. 4151.

WANT position as overseer carding and spinning. Am 44 years old and have had 20 years' experience as overseer and assistant superintendent. Can furnish best of references. No. 4152.

WANT position as overseer plain weaving or overseer cloth room. Have had more than 25 years' experience on practically all kinds of goods. Am qualified to handle either position. Age 46, have family. Best of references. No. 4153.

WANT position as overseer spinning. Have had long experience in the spinning room and have taken a course with the I. C. S. Good references. No. 4154.

WANT position as overseer of slasher department. Age 32, eight years' experience as slasher and beamer. Good references. No. 4154.

WANT position as overseer weaving. Long experience on wide variety of fabrics and am capable man in every respect. Good references from past and present employers. No. 4156.

WANT position as superintendent of tire yarn or fabric plant, or fine combed yarn mill. Now located in East, but have had 6 years' experience in South. Long term of services superintendent and overseer and am reliable man who can get excellent results. Excellent references. No. 4157.

WANT position as overseer cloth room. Long experience on lawns and sheetings and can guarantee satisfaction. Good references. No. 4158.

WANT position as overseer of small card room or second hand in large room. Am also excellent card grinder. Long experience in good mill. A-1 references. No. 4159.

WANT position as superintendent. Have had 18 years as such and am now employed in my 19th year. Can handle yarn or cloth mill and am high class, practical man. No. 4160.

WANT position as overseer carding or spinning, or both. Past experience and training fits me to handle job in efficient manner. Good references. No. 4161.

WANT position as overseer spinning, or overseer weaving. Long experience in good mills in both departments. Reliable, steady man of good habits. Excellent references. No. 4162.

WANT position as master mechanic. Now employed. Experienced in both steam and electric plants and can handle work in satisfactory manner. Good references. No. 4163.

WANT position as overseer spinning, experienced for many years on both carded and fine combed yarns. Would like to correspond with mill needing high-class man. Excellent references. No. 4164.

WANT position as overseer weaving. Experienced on many different fabrics and am competent and reliable. No. 4165.

WANT position as superintendent. Fitted by training and experience to handle large mill in satisfactory manner. Good references. No. 4166.

WANT position as superintendent; yarn mill preferred. Now superintendent of good yarn mill and have held job for over two years. Giving entire satisfaction. Thoroughly understand carding and spinning. 15 years as superintendent and overseer. Good references. No. 4167.

WANT position as superintendent of cloth mill. Long experience and can give references from many mill executives to show excellent record of past service. No. 4168.

WANT position as superintendent of yarn or cloth mill. Now employed as night superintendent but wish day job. References to show ability, character and past record. No. 4169.

WANT position as superintendent or will take overseer's place in any department. Thoroughly qualified to handle any room in the mill. Best of references. No. 4170.

WANT position as superintendent or carder and spinner. Will go anywhere. Prefer yarn mill of 5,000 to 20,000 spindles. Can come at once. Best of references. No. 4176.

WANT position as carder or spinner. Ten years' experience in carding, spinning and winding. Now employed, but will change on short notice. Age 37, with family. References from present and past employers. No. 4172.

WANT position as superintendent. Practical man, good pusher, can get quality production on all classes of yarns. Good references. No. 4173.

WANT position as overseer spinning. Practical man of long experience on practically all yarn counts made in South. Good references. No. 4174.

WANT position as overseer spinning. Have had 20 years' experience in spinning, spooling and warping in some of the best mills in South, and West, both white and colored work. Age 36, married, sober, now employed as overseer. Good references. No. 4175.

WANT position as superintendent or would take overseer of carding and spinning. Many years' experience as superintendent and overseer and am well qualified in every respect. Best of references. No. 4171.

SUPERINTENDENT or carder and spinner desires position. Would take place as night superintendent in large mill. Prefer mill on plain work. Satisfactory references. No. 4177.

WANT position as superintendent of mill or plain weaving or hosiery yarn. Am now 22 years of age and can give good references. Now employed as superintendent. No. 4178.

WANT position as superintendent or assistant superintendent in medium size mill. Would consider weave room in large mill. Best of references. No. 4179.

WANT position as spinner. Age 48. Have had 20 years' experience and can give excellent references. No. 4180.

WANT position as superintendent of finishing in yarn plant. Long experience in large Eastern mill and have excellent record of service. Fine references. No. 4181.

WANT position as carder or spinner, or box comb. Am specialist in combed yarn work and have had a long term of satisfactory service. Excellent references. No. 4182.

WANT position as shipping clerk. Four years' experience and can handle big job. Now employed as shipping clerk. Gilt-edged references. No. 4183.

WANT position as carder and spinner. Now employed as such, but wish a larger place. Experienced, practical and reliable man. No. 4184.

WANT position as overseer finishing department, white or colored goods. Have had 16 years' experience in cloth room, 12 years as overseer on white and colored goods, wet and dry finish. Best of references. No. 4185.

WANT position as overseer spinning. Have had 12 years' experience as overseer and can furnish best of references. No. 4186.

WANT position as overseer weaving. Can handle either plain or fancy work both colored and white. Now employed. First-class references. No. 4187.

WANT position as superintendent, carder, spinner or carder and spinner. Have acceptably filled overseer's position for long term of years. Best of references. No. 4188.

WANT position as master mechanic and engineer. Experienced and skilled mechanic of long experience. Best of references. No. 4189.

WANT position as overseer spinning. 12 years as overseer and 5 years as overhauler in spinning and twisting. Good references. Address No. 4190.

WANT position as superintendent, or overseer weaving or designer. Have specialized in fancy weaving and designing and can show samples that have proved business getting. Long record of satisfactory service in fine weaving plants. Good references. No. 4192.

WANT position as superintendent of small yarn mill or carder and spinner in larger mill. Have had 20 years as overseer. Good references. No. 4191.

WANT position as superintendent or carder and spinner. Now employed but want better job. First-class references. No. 4193.

WANT position as superintendent. Prefer weaving mill. Practical man of long experience on great variety of fabrics. Good references. No. 4194.

WANT position as overseer carding anywhere in South. Long experience and also graduate of I. C. S. Good references. No. 4197.

WANT position as overseer spinning, twisting or winding at not less than \$40 weekly. Have had 25 years in the mill. 10 years as overseer, have run present room 3 years. Good references. No. 4198.

WANT position as overseer weaving. My experience has been as overseer in a number of large weave rooms and many kinds of goods. Excellent references. No. 4196.

WANT position as overseer of small weave room on plain goods. Am hustler for quality production and good manager of help. Good references. No. 4198.

WANT position as carder or spinner or superintendent. Now employed. Many years as both superintendent and overseer and am competent worker. Good references. No. 4199.

WANT position as carder. Have had 7 years as overseer and can give first-class references. No. 4200.

WANT position as superintendent of yarn or weave mill, or overseer weaving. Long experience in carding, spinning and weaving and winding and can give good references. No. 4201.

WANT position as superintendent of yarn mill. Prefer plant on tire fabrics. Experienced man of good habits and character and can give good references. No. 4202.

WANT position as overseer weaving on any kind of plain work; 12 years as overseer and have always been able to get the goods. Now employed but have good reasons for changing. Good references. No. 4203.

WANT position as spinner. Have held present job for over 6 years and made good record. Can get quality production at right price. Good references. No. 4203.

WANT position as carder or carder and spinner. Am hustler for production and quality and know how to keep costs down. No. 4204.

WANT position as superintendent of yarn mill. Have had 12 years' experience. Have finished course in grading and stapling cotton. Know mill business thoroughly. Best of references as to character and ability. No. 4206.

WANT position as carder in small mill or second hand in large mill. At present employed by good mill but desire to change. Good references as to character and ability. No. 4207.

WANT position as carder. Thoroughly understand the carding process and have long term of experience in good mill. Best of references. No. 4208.

WANT position as superintendent. Experienced and reliable man who can get results. Experience gained in some of the best mills in the Carolinas. Excellent references. No. 4209.

WANT position as superintendent. Am competent executive and good manager of help, experienced in all departments of mill and man of good character and habits. Best of references. No. 4210.

WANT position as superintendent of medium sized yarn mill or assistant superintendent in large mill. Prefer mill in Georgia, Alabama or Mississippi. Long experience as overseer spinning. Have held present place as assistant superintendent for many years, making 4s to 40s single and ply cones, tubes, skeins and warps. References. No. 4111.

WANT position as superintendent or overseer carding and spinning. Am 41 years old, have had 20 years' experience as overseer and superintendent of mills in Georgia. Can give good references as to character and ability and can come at once. Good manager of help. No. 4113.

MASTER mechanic and chief engineer of extraordinary ability will consider proposition by March first. Fine machinist and mechanical engineer. Correspondence strictly confidential. No. 4114.

WANT position as superintendent of yarn mill, or would accept place as carder and spinner. Practical man of long experience who can get results and who can successfully manage help. References. No. 4223.

WANT position as overseer carding. Qualified by experience and training to handle card room in thoroughly practical and up-to-date manner. Good references. No. 4224.

WANT position as superintendent or overseer large weave room. Now employed as superintendent but would like better job. Have long record of successful service and references to show it. No. 4225.

WANT position as overseer weave room or cloth room. Now employed, but wish larger job. Experienced on many lines of goods, competent and reliable. References to show character and ability. No. 4226.

WANT position as assistant superintendent. Age 25, graduate of well-known textile school, three years' experience in all departments of mill, two years as manager of testing laboratory in large mill. Excellent reference. No. 4227.

WANT position as overseer weaving. My experience covers a long term of years in a number of first-class mills, making a wide variety of goods. Excellent references. No. 4228.

WANT position as carder and spinner, either or both. Age 35, have family. Experienced man who can give as reference some of the best mills in the South. No. 4231.

WANT position as overseer of weaving or superintendent of plain weaving mill. Long experience as both superintendent and overseer and can get excellent results. No. 4233.

WANT position as overseer carding. Now employed as night carder, but wish day job. Have had 20 years' experience in carding, spinning, spooling and warping, both white and colored work. Can furnish good references. No. 4234.

CLASSIFIED LIST OF ADVERTISERS

- AIR CONDITIONERS**—
American Moistening Co.
The Bahnsen Co.
Carrier Engineering Co.
Parks-Cramer Co.
- ALBONE**—
Roessler & Haaslaacher.
- ARCHITECTS & MILL ENGINEERS**—
Lockwood, Greene & Co.
Sirrime & Co., J. E.
- ASH HANDLING EQUIPMENT**—
Link-Belt Co.
- AUTOMATIC FEEDS FOR COTTON**—
Saco-Lowell Shops.
Whitin Machine Works.
- AUTOMATIC STOP MOTION**—
Eclipse Textile Devices, Inc.
- AUTOMATIC YARN CLEANER**—
Eclipse Textile Devices, Inc.
- BALL-BEARING**—
Fafnir Bearing Co.
S. K. F. Industries, Inc.
- BALERS**—
Economy Baler Co.
Saco-Lowell Shops.
- BALING PRESSES**—
Economy Baler Co.
- BANDS AND TAPE**—
American Textile Banding Co.
- BANKS**—
American Trust Co.
- BEAMING AND WARPING MACHINERY**—
Draper Corporation.
T. C. Entwistle Co.
Saco-Lowell Shops.
- BEAM HEADS**—
Mossberg Pressed Steel Corp.
- BEAMS (All Steel)**—
Mossberg Pressed Steel Corp.
- BEAMING COMBS**—
Steel Heddle Mfg. Co.
- BEARINGS, ROLLER**—
Hyatt Roller Bearing Co.
- BEARINGS, SHAFT**—
Fafnir Bearing Co.
Hyatt Roller Bearing Co.
William Sellers & Co., Inc.
Wood's, T. B. & Sons Co.
- BEARINGS, TEXTILE MACHINERY**—
Fafnir Bearing Co.
Hyatt Roller Bearing Co.
- BELT CONVEYORS**—
Link-Belt Co.
- BELT TIGHTENERS**—
Link-Belt Co.
Wood's, T. B. & Sons Co.
- BELTING**—
Charlotte Leather Belting Co.
Chicago Belting Co.
Druid Oak Belting Co.
Grant Leather Corp.
Graton & Knight Mfg. Co.
E. F. Houghton & Co.
Edward R. Ladew Co.
I. B. Williams & Sons.
- BELT, CEMENT**—
Chicago Belting Co.
E. F. Houghton & Co.
Edward R. Ladew Co.
Graton & Knight Mfg. Co.
I. B. Williams & Sons.
- BELT LACING**—
Chicago Belting Co.
Edward R. Ladew Co.
E. F. Houghton & Co.
Graton & Knight Mfg. Co.
- BELTING, LINK**—
Link-Belt Co.
- BENCH DRAWER, STEEL**—
Lupton's, David, Sons Co.
- BENCH LEGS, WRESSED STEEL**—
Lupton's, David, Sons Co.
- BICARBONATE OF SODA**—
Mathieson Alkali Works, Inc.
- BLEACHERIES**—
Sayles Finishing Plants, Inc.
- BLEACHING MATERIALS**—
Arabol Mfg. Co.
Arnold, Hoffman & Co., Inc.
Atlantic Dyestuff Co.
Borne, Scrymser Co.
Bosson & Lane.
J. B. Ford Co.
Klipstein & Co., A.
National Aniline & Chemical Co.
Roessler & Haaslaacher Chem. Co.
L. Sonneborn Sons, Inc.
United Chemical Products Co.
Wolf, Jacques & Co.
- BOBBIN HOLDERS**—
Fournier & Lemoine.
- BOBBINS AND SPOOLS**—
Courtney, The Dana S., Co.
David Brown Co.
Jordan Mfg. Co.
Lestershire Spool & Mfg. Co.
Lowell Shuttle Co.
Mossberg Pressed Steel Corp.
Walter L. Parker Co.
Steel Heddle Manufacturing Co.
—See also Spools & Bobbins.
- BOBBIN SAVING TREATMENT**—
The Textilac Co.
- BOXES**—
Wilts Veneer Co.
- BOX SHOOKS**—
Wilts Veneer Co.
- BLOWERS AND BLOWERS SYSTEMS**—
Carrier Engineering Corp.
Parks-Cramer Co.
- BOBBIN STRIPPER**—
Terrell Machine Co.
- BRETTON MINERAL OIL**—
Borne, Scrymser Co.
- BUNCH BUILDERS**—
Holcomb Bunch Builder Corp.
- CALENDERS**—
H. W. Butterworth & Sons Co.
B. F. Perkins & Son, Inc.
- CALENDER ROLLS**—
B. F. Perkins & Son, Inc.
- CARDS**—
Saco-Lowell Shops.
Whitin Machine Works.
Howard Bros. Mfg. Co.
- CARD CLOTHING**—
Ashworth Bros.
- CARD GRINDING MACHINERY**—
Dronsfield Bros.
T. C. Entwistle Co.
Roy & Son Co., B. S.
Saco-Lowell Shops.
Whitin Machine Works.
- CARRIER APRONS**—
Link-Belt Co.
- CAUSTIC SODA**—
Arnold, Hoffman & Co., Inc.
Mathieson Alkali Works, Inc.
- CHAIN BELTS AND DRIVES**—
Link-Belt Co.
Morse Chain Co.
- CHEMICALS**—
Borne, Scrymser Co.
J. B. Ford Co.
International Chemical Co.
Mathieson Alkali Works, Inc.
Seydel-Thomas Co.
L. Sonneborn Sons, Inc.
- CLEANING MACHINES**—
Carolina Specialty Co.
- CLOTH PILERS**—
B. F. Perkins & Son, Inc.
- CLOTH PRESSES**—
Economy Baler Co.
- CLUTCHES, FRICTION**—
Wood's, T. B. & Sons Co.
- CLUTCH SPINDLES**—
Fournier & Lemoine.
- COAL**—
Sugar Creek Coal Sales Co.
- COAL HANDLING MACHINERY**—
Link-Belt Co.
- COMBS**—
Steel Heddle Mfg. Co.
- COMBS (Beamers, Wipers, Slashers)**—
T. C. Entwistle Co.
- COMBERS**—
John Hetherington & Sons, Ltd.
- COMMISSION MERCHANTS**—
Catlin & Co.
J. H. Lane & Co.
Mauney-Steel Co.
Paulson-Linkroom & Co.
Ridley, Watts & Co.
The Farish Co.
- COMPRESSORS (AIR)**—
Allis-Chalmers Mfg. Co.
- CONDENSERS**—
Allis-Chalmers Mfg. Co.
- CONDITIONING MACHINES**—
American Moistening Co.
- CONDUIT FITTINGS**—
Chicago Fuse Mfg. Co.
- CONES, PAPER**—
Sonoco Products Co.
- CONE VISE COUPLINGS**—
William Sellers & Co., Inc.
- CONVEYING SYSTEMS**—
Link-Belt Co.
- COOLERS (AIR)**—
—See Humidifying Apparatus.
- COTTON**—
Jackson, Hill & Co.
Lesser-Goldman Cotton Co.
Lineberger Bros.
B. H. Parker & Co.
Rose Bros.
Sanders, Orr & Co.
Stewart Bros. Cotton Co.
Tanner & Jones.
Wm. & York Wilson.
H. H. Wolfe & Co.
- COTTON MACHINERY**—
Ashworth Bros.
Atherton Pin Grid Bar Co.
Barber-Colman Co.
Carolina Specialty Co.
Crompton & Knowles Loom Works.
Dixon Lubricating Saddle Co.
Draper Corp.
Fales & Jenks Machine Co.
H. & B. American Machine, Inc.
T. C. Entwistle Co.
Hopedale Mfg. Co.
Metallic Drawing Roll Co.
National Ring Traveler Co.
Roy & Son, B. S.
Saco-Lowell Shops.
Stafford Co., The.
Universal Winding Co.
Whitin Machine Works.
Whitinsville Spinning Ring Co.
Tolhurst Machine Works.
Terrell Machine Co.
- COTTON OPENERS AND LAPPERS**—
Carolina Specialty Co.
Saco-Lowell Shops.
Whitin Machine Works.
- COTTON SOFTENERS**—
Arabol Mfg. Co.
Arnold, Hoffman & Co., Inc.
Borne, Scrymser Co.
Bosson & Lane.
E. F. Houghton & Co.
L. Sonneborn Sons, Inc.
Seydel-Thomas Co.
Wolf, Jacques & Co.
- COTTON WASTE MACHINERY**—
Saco-Lowell Shops.
Whitin Machine Works.
- COUNTERS (Revolution, Hank, Pick, etc.)**—
The Root Co.
- COUPLINGS, SHAFT**—
William Sellers & Co., Inc.
Wood's, T. B. & Sons Co.
- CRANES**—
Link-Belt Co.
- DESKS, STEEL FACTORY**—
Lupton's, David, Sons Co.
- DISINFECTANTS**—
Carolina Specialty Co.
L. Sonneborn Sons, Inc.
- DOBBY CHAIN**—
Crompton & Knowles Loom Works.
Rice Dobby Chain Co.
- DOFFING BOXES**—
Rogers Fibre Co.
- DOUBLERS**—
Saco-Lowell Shops.
Universal Winding Co.
- DOORS, STEEL**—
Lupton's, David, Sons Co.
- DRAWING ROLLS**—
Metallic Drawing Roll Co.
- DRINKING FOUNTAINS**—
Puro Sanitary Drinking Fountain Co.
- DRIVES, SILENT CHAIN**—
Link-Belt Co.
Morse Chain Co.
- DROP WIRES**—
Crompton & Knowles Loom Works.
Greist Mfg. Co.
Hopedale Mfg. Co.
Mossberg Pressed Steel Corp.
- DRYERS, CENTRIFUGAL**—
Roy & Son Co., B. S.
Tolhurst Machine Works.
- DYEING, DRYING, BLEACHING AND FINISHING MACHINERY**—
H. W. Butterworth & Sons Co.
Franklin Process Co.
Klauder-Weldon Dye Machinery Co.
Perkins, B. F. & Sons, Inc.
- DYESTUFFS AND CHEMICALS**—
Atlantic Dyestuff Co.
Borne, Scrymser Co.
Bosson & Lane.
E. I. du Pont de Nemours & Co., Inc.
Metz, H. A. & Co.
National Aniline & Chemical Co.
Roessler & Haaslaacher Chemical Co.
L. Sonneborn Sons, Inc.
United Chemical Products Co.
Wolf, Jacques & Co.
- DYE WORKS**—
Sayles Finishing Plants, Inc.
- ECLIPSE VAN NESS DYEING MACHINE**—
Eclipse Textile Devices, Inc.
- ELECTRICAL CONTRACTORS**—
Huntington & Querry.
- ELECTRIC FANS**—
Allis-Chalmers Mfg. Co.
General Electric Co.
Westinghouse Electric & Mfg. Co.
- ELECTRIC HOISTS**—
Allis-Chalmers Mfg. Co.
Link-Belt Co.
- ELECTRIC LIGHTING**—
Allis-Chalmers Mfg. Co.
Cooper-Hewitt Electric Co.
General Electric Co.
Huntington & Querry.
Westinghouse Electric & Mfg. Co.
- ELECTRIC MOTORS**—
Allis-Chalmers Mfg. Co.
General Electric Co.
Westinghouse Electric & Mfg. Co.
- ELECTRIC SUPPLIES**—
Chicago Fuse Mfg. Co.
Cooper-Hewitt Electric Co.
General Electric Co.
Westinghouse Electric & Mfg. Co.
- ELEVATORS**—
Link-Belt Co.
- ENGINEERS, MILL**—
—See Architects and Mill Engineers.
- ENGINEERS (VENTILATING)**—
Bahnsen Co.
Parks-Cramer Co.
- ENGINES (STEAM, OIL, GAS, PUMP, etc.)**—
Allis-Chalmers Mfg. Co.
Sydnor Pump & Well Co.
—See also Ventilating Apparatus.
- EXPERT TEXTILE MECHANIC**—
J. D. Hollingsworth.
- EXTRACTORS**—
American Laundry Machinery Co.
Tolhurst Machine Works.
- FENCES**—
Anchor Post Iron Co.
Cyclone Fence Co.
Page Fence and Wire Products Assn.
- FENCES (Iron and Wire)**—
Anchor Post Iron Works.
Cyclone Fence Co.
Page Fence and Wire Products Assn.
- FINISHERS**—
Sayles Finishing Plants, Inc.
- FINISHING COMPOUNDS**—
Arnold, Hoffman & Co., Inc.
Borne, Scrymser Co.
Seydel-Thomas Co.
- FINISHING MACHINERY**—
B. F. Perkins & Son, Inc.
- FINISHING MACHINERY**—
—See Dyeing, Drying, Bleaching and Finishing.
- FIRE INSURANCE**—
Fireman's Mutual Insurance Co.
- FLAT WALL PAINT**—
E. I. du Pont de Nemours & Co., Inc.
- FLOOR CLEANERS**—
Nichols Mfg. Co.
Poland Soap Works.
- FLOOR STANDS**—
Wood's, T. B. & Sons Co.
- FLUTED ROLLS**—
Whitin Machine Works.
- FLYER PRESSERS AND OVERHAULERS**—
Southern Spindle & Flyer Co.
Whitin Machine Works.
- FLYERS**—
Whitin Machine Works.
Southern Spindle & Flyer Co.
- FRAMES**—
Steel Heddle Mfg. Co.
- FRICTION CLUTCHES**—
Wood's, T. B. & Sons Co.
—See Clutches.
- FUSES**—
Chicago Fuse Mfg. Co.
- GATES**—
Anchor Post Iron Works.
- GEARING, SILENT FLEXIBLE**—
Link-Belt Co.
- GEARS**—
Dan Gear Co.
- GRATE BARS**—
Thomas Grate Bar Co.
- GRAB BUCKETS**—
Link-Belt Co.
- GREASES**—
Masury-Young Co.
N. Y. & N. J. Lubricant Co.
L. Sonneborn Sons, Inc.
- GRINDING AND POLISHING MACHINES**—
Roy, B. S. & Son Co.
- HANGERS (Ball and Socket)**—
William Sellers & Co., Inc.
- HANGERS, SHAFT**—
Fafnir Bearing Co.
Hyatt Roller Bearing Co.
William Sellers & Co., Inc.
Wood's, T. B. & Sons Co.
- HARDWARE SUPPLIES**—
Textile Mill Supply Co.
- HARNESSE TWINE**—
Garland Mfg. Co.
- HARNESSE AND FRAMES**—
—See Heddles and Frames.
- HEDDLES AND FRAMES**—
Garland Mfg. Co.
Steel Heddle Mfg. Co.
L. S. Watson Mfg. Co.
- HOPPER-FEED HAND STOKERS**—
The J. H. Williams Co.
- HUMIDIFYING AND AIR CONDITIONING APPARATUS**—
American Moistening Co.
The Bahnsen Co.
Carrier Engineering Corp.
Parks-Cramer Co.
- HUMIDITY CONTROLLER**—
American Moistening Co.
The Bahnsen Co.
Carrier Engineering Corp.
Parks-Cramer Co.
- HYDRO-EXTRACTORS**—
Tolhurst Machine Co.
- INDIGO DYEING MACHINERY**—
H. W. Butterworth & Sons Co.
- KNITTING MACHINERY**—
Hepworth, John W., & Co.
- KNITTING NEEDLES & SUPPLIES**—
Williams, Chauncey A.
- KNIT GOODS, FINISHING MACHINES**—
Kaumagraph Co.
Morrow Machine Co., The.
- KNOTTERS**—
Barber-Colman Co.
Mill Devices Co.
- LAUNDRY MACHINERY**—
American Laundry Machinery Co.
- LANDSCAPE ARCHITECT**—
E. S. Draper.
- LEATHER PACKINGS**—
Chicago Belting Co.
Edward R. Ladew Co.
E. F. Houghton & Co.
Graton & Knight Mfg. Co.
- LEATHER STRAPPING**—
Edward R. Ladew Co.
Graton & Knight Mfg. Co.
- LIQUID CHLORINE**—
Arnold, Hoffman & Co., Inc.
Mathieson Alkali Works, Inc.
- LOOMS**—
Crompton & Knowles Loom Works.
Draper Corp.
Hopedale Mfg. Co.
Saco-Lowell Shops.
Stafford Co., The.
- LOOM BEAMS AND HEADS**—
Mossberg Pressed Steel Corp.

CLASSIFIED LIST OF ADVERTISERS

- LOOM DROP WIRES**—
Crompton & Knowles Loom Works.
Greist Mfg. Co.
Hopedale Mfg. Co.
Mossberg Pressed Steel Corp.
Steel Heddle Mfg. Co.
- LOOM HARNESS**—
Atlanta Harness and Reed Mfg. Co.
Garland Mfg. Co.
Palmetto Loom Harness and Reed Works.
Steel Heddle Mfg. Co.
- LOOM PICKERS**—
Edward R. Ladew Co.
Garland Mfg. Co.
Graton & Knight Mfg. Co.
- LOOM REEDS**—
Atlanta Harness and Reed Mfg. Co.
Palmetto Loom Harness and Reed Works.
Steel Heddle Mfg. Co.
- LUBRICANTS**—
Borne, Scrymser & Co.
N. Y. & N. J. Lubricant Co.
L. Sonneborn Sons, Inc.
- MACHINERY ENAMEL**—
E. I. du Pont de Nemours & Co., Inc.
- MANGLES**—
American Laundry Machinery Co.
H. W. Butterworth & Sons Co.
- MARKERS**—
Kaumagraph Co.
Merrow Machine Co.
- MERCERIZING MACHINERY**—
H. W. Butterworth & Sons Co.
- METAL PAINT**—
E. I. du Pont de Nemours & Co., Inc.
Wadsworth, Howland & Co., Inc.
- METALLIC ROLLS**—
Metallic Drawing Roll Co.
- METERS**—
Allis-Chalmers Mfg. Co.
General Electric Co.
Westinghouse Electric & Mfg. Co.
- MILL ARCHITECTS**—
See Architects.
- MILL CONSTRUCTION**—
David Lupton's Sons, Inc.
- MILL LIGHTING**—
See Electric Lighting.
- MILL STARCHES**—
Arnold, Hoffman & Co., Inc.
Corn Products Refining Co.
Penick & Ford, Ltd.
Keefer Starch Co.
Stein, Hall & Co.
- MILL SUPPLIES**—
Dixon Lubricating Saddle Co.
Garland Mfg. Co.
Textile Mill Supply Co.
Thomas Grate Bar Co.
- MILL WHITE**—
E. I. du Pont de Nemours & Co., Inc.
L. Sonneborn Sons, Inc.
Wadsworth, Howland & Co., Inc.
- MOTORS**—
Allis-Chalmers Mfg. Co.
General Electric Co.
Westinghouse Electric & Mfg. Co.
- OILS**—
Arnold, Hoffman & Co., Inc.
Borne, Scrymser & Co.
E. F. Houghton & Co.
N. Y. & N. J. Lubricant Co.
Klipstein, A. & Co.
U. S. Oil Co.
Wadsworth, Howland & Co.
Wolf, Jacques & Co.
- ONE-PIECE FURNACE LININGS**—
The Cornish Co.
- OPENING MACHINERY**—
Carolina Specialty Co.
Saco-Lowell Shops
- OVERSEAMING AND OVEREDGING MACHINES**—
Merrow Machine Co.
- OVERHAULERS**—
Southern Spindle & Flyer Co.
- PAINTS**—
Carolina Specialty Co.
E. I. du Pont de Nemours & Co., Inc.
L. Sonneborn Sons, Inc.
Tripod Paint Co.
Wadsworth, Howland & Co.
- PARTITIONS, STEEL**—
Lupton's, David, Sons Co.
- PATENTS**—
Siggers & Siggers.
- PERBORATE OF SODA**—
Roessler & Hasslacher Chemical Co.
- PICKERS, LEATHER**—
Edward R. Ladew Co.
Garland Mfg. Co.
Graton & Knight Mfg. Co.
- PICKER STICKS**—
Garland Mfg. Co.
- PIPE AND FITTINGS**—
Parks-Cramer Co.
- PORTABLE ELEVATORS**—
Link-Belt Co.
- POWER TRANSMISSION MACHINERY**—
Allis-Chalmers Mfg. Co.
Hyatt Roller Bearing Co.
Fafnir Bearing Co.
Link-Belt Co.
Morse Chain Co.
William Sellers & Co., Inc.
Wood's, T. B., Sons Co.
- PREPARATORY MACHINERY (COTTON)**—
Saco-Lowell Shops.
Whitin Machine Works.
- PICKERS AND LAPPERS**—
Whitin Machine Works.
- PRESSES**—
Economy Baler Co.
Saco-Lowell Shops.
- PULLEYS, CAST IRON**—
William Sellers & Co., Inc.
Wood's, T. B., Sons Co.
- PUMPS**—(Boiler Feed also Centrifugal)—
Allis-Chalmers Mfg. Co.
Sydnor Pump & Well Co.
- PEROXIDE OF SODIUM**—
Roessler & Hasslacher.
- PRESSES**—
American Laundry Machinery Co.
Collins Bros.
- QUILLERS**—
Crompton & Knowles Loom Works.
Universal Winding Co.
Whitin Machine Works.
- QUILL CLEANERS**—
Terrell Machine Co.
- RAILINGS (IRON)**—
Anchor Post Iron Works.
- READY BUILT HOMES**—
The Minter Homes Co.
- RECEPTACLES**—
Economy Baler Co.
Rogers Fibre Co.
- RING SPINNING FRAMES**—
Whitin Machine Works.
Saco-Lowell Shops.
- RING TRAVELERS**—
Dary Ring Traveler Co.
National Ring Traveler Co.
Victor Ring Traveler Co.
U. S. Ring Traveler Co.
- ROLLS**—
The Whitin Machine Works.
Metallic Drawing Roll Co.
Saco-Lowell Shops.
Southern Spindle & Flyer Co.
- ROLLER BEARINGS**—
Fafnir Bearing Co.
Hyatt Roller Bearing Co.
- ROLLER CLOTH**—
Best, Edward H. & Co.
- ROOFING**—
Lupton's, David, Sons, Inc.
- ROVING CANS AND BOXES**—
Rogers Fibre Co.
- ROVING MACHINERY**—
Whitin Machine Works.
Saco-Lowell Shops.
- SADDLES**—
Dixon Lubricating Saddle Co.
- SANITARY EQUIPMENT**—
Vogel Co., Joseph A.
- SANITARY FOUNTAINS**—
See Drinking Fountains.
- SASH, STEEL**—
Lupton's, David, Sons Co.
- SCALLOP MACHINES**—
Merrow Machine Co.
- SCOURING POWDERS**—
Bosson & Lane.
Nichols Mfg. Co.
- SESQUICARBONATE OF SODA**—
Mathieson Alkali Works, Inc.
- SECTION BEAM HEADS**—
Mossberg Pressed Steel Corp.
- SELLING AGENTS (COTTON GOODS)**—
Amory, Browne & Co.
Converse & Co.
Curran & Barry.
Joshua L. Bailey & Co.
W. H. Langley & Co.
Leslie, Evans & Co.
Tatum, Pinkham & Greay
Wellington, Sears & Co.
- SEWING MACHINES**—
Merrow Machine Co.
- SHAFTING, HANGERS, ETC.**—
See Power Transmission Machinery.
- SHAFTING**—
Fafnir Bearing Co.
William Sellers & Co., Inc.
Wood's, T. B., Sons Co.
- SHELL STITCH MACHINES**—
Merrow Machine Co.
B. F. Perkins & Son, Inc.
- SHEET METAL WORK**—
J. N. McCausland & Co.
- SHELVING STEEL**—
Lupton's, David, Sons Co.
- SHUTTLES**—
David Brown Co.
Lowell Shuttle Co.
Draper Corp.
Hopedale Mfg. Co.
Shambow Shuttle Co.
L. S. Watson Mfg. Co.
The J. H. Williams Co.
- SILENT CHAIN DRIVE**—
Link-Belt Co.
Morse Chain Co.
- SINGING MACHINERY**—
H. W. Butterworth & Sons Co.
- SIZING STARCHES, GUMS**—
Arnold, Hoffman & Co., Inc.
Atlantic Dyestuff Co.
Arabol Mfg. Co.
L. Sonneborn Sons, Inc.
Stein, Hall & Co.
- SIZING COMPOUNDS**—
Arnold, Hoffman & Co., Inc.
Borne, Scrymser Co.
Bosson & Lane.
A. E. Staley Mfg. Co.
Corn Products Refining Co.
Drake Corp.
Hawley's Laboratories.
Seydel-Thomas Co.
United Chemical Products Co.

ESTABLISHED 1815

Arnold, Hoffman & Co.

INCORPORATED

NEW YORK, N. Y. PROVIDENCE, R. I. BOSTON, MASS.
PHILADELPHIA, PA. CHARLOTTE, N. C.*Importers and Manufacturers of*

Starches, Gums, Dextrine Alizarine Assistant, Soluble Oil. Soap

And Every Known Material from every part of the world
for Starching, Softening, Weighting, and Finishing
Yarn, Thread or any Fabric

Special attention given by practical men to specialties for Sizing, Softening, Finishing and Weighting Cotton, Woolen and Worsted Fabrics; combining the latest European and American methods.

*Sole Agents For***BELLE ALKALI CO., of Belle, W. Va.***Manufacturers of*Liquid Chlorine, Bleaching Powder, Caustic Soda
Solid or Flaked**GREIST**LOOM
DROP WIRESAll we ask is the opportunity to quote you—send sample of wire with request
for quotation—we will submit samples of our product—prompt deliveries and
unlimited capacity for large orders—small requirements receive the same
attention.**THE GREIST MFG. CO., Dept. R, New Haven, Conn.**

Southern Representative:

James McCabe, P. O. Box 219, Greenville, S. C.

WENTWORTH Double Duty Travelers

Last Longer, Make Stronger Yarn, Run Clear, Preserve the
SPINNING RING. The greatest improvement entering the Spinning
room since the advent of the HIGH SPEED SPINDLE.

Manufactured only by the

National Ring Traveler Co.

Providence, R. I.

31 W. First Street, Charlotte, N. C.

CLASSIFIED LIST OF ADVERTISERS

John P. Marston Co.
H. A. Metz & Co., Inc.
A. Klipstein & Co.
Seydel Chemical Co.
Seydel-Thomas Co.
Wolf, Jacques & Co.
SKYLIGHT, ROLLED STEEL—
Lupton's, David, Sons Co.
SLASHER COMBS—
Steel Heddle Mfg. Co.
SOFTENERS (COTTON)—
Arnold, Hoffman & Co., Inc.
United Chemical Products Corp.
Arabol Mfg. Co.
Bosson & Lane.
Wolf, Jacques & Co.
Metz, H. A., & Co., Inc.
L. Sonneborn Sons, Inc.
Seydel Chemical Co., The.
U. S. Bobbin & Shuttle Co.
SOFTENERS—
Arnold, Hoffman & Co., Inc.
Borne, Scrymser Co.
L. Sonneborn Sons, Inc.
Seydel-Thomas Co.
SKEWERS—
U. S. Bobbin & Shuttle Co.
Courtney, The Dana S., Co.
Jordan Mfg. Co.
Walter L. Parker Co.
David Brown Co.
SLASHERS AND EQUIPMENT—
Saco-Lowell Shops.
SOAPS—
Arabol Mfg. Co.
Arnold, Hoffman & Co., Inc.
Klipstein, A., & Co.
L. Sonneborn Sons, Inc.
United Chemical Products Co.
SODA ASH—
J. B. Ford Co.
Mathieson Alkali Works, Inc.
SOFTENERS (OIL)—
Bosson & Lane.
E. F. Houghton & Co.
SOLOZONE—
Roessler & Hasslacher Chemical Co.
SPINDLES—
Draper Corp.
Saco-Lowell Shops.
Southern Spindle & Flyer Co.
Whitin Machine Works.
SPINNING FRAMES—
SPINDLE REPAIRERS—
Fournier & Lemoine.
Fales & Jenks Machine Co.
SPINNING FRAME SADDLES—
Dixon Lubricating Saddle Co.
SPINNING RINGS—
Draper Corp.
Pawtucket Spinning Ring Co.
Whitin Machine Works.
Whitinsville Spinning Ring Co.
SPOOLS—
David Brown Co.
U. S. Bobbin & Shuttle Co.
Courtney, The Dana S., Co.
Jordan Mfg. Co.
Lestershire Spool & Mfg. Co.
Steel Heddle Mfg. Co.
Walter L. Parker Co.
See Bobbins, Spools, Shuttles.
SPROCKETS, SILENT CHAIN—
Link-Belt Co.
SPOOLERS—
Draper Corp.
Saco-Lowell Shops.
Whitin Machine Works.
SPINNING TAPES—
American Textile Banding Co.
Barber Mfg. Co.
STARCH—
Arnold, Hoffman & Co., Inc.
Corn Products Refining Co.
Keefer Starch Co.
Penick & Ford, Ltd.
Stein, Hall & Co.
STOCKS AND BONDS—
American Trust Co.

STRIPPER CARDS—
L. S. Watson Mfg. Co.
SWITCH BOXES—
Chicago Fuse Mfg. Co.
TEXTILE MACHINERY SPECIALTIES—
Cocker Machine and Foundry Co.
Hyatt Roller Bearing Co.
TEXTILE SODA—
J. B. Ford Co.
TEMPLES—
Draper Corp.
Hopedale Mfg. Co.
TESTING APPARATUS (Fabrics)—
B. F. Perkins & Son, Inc.
Henry L. Scott & Co.
TRANSFER STAMPS—
Kaumagraph Co.
TRANSMISSION BELTS—
Charlotte Leather Belting Co.
Chicago Belting Co.
Grant Leather Co.
Edward R. Ladew Co.
E. F. Houghton & Co.
Graton & Knight Mfg. Co.
TRANSMISSION MACHINERY—
Allis-Chalmers Mfg. Co.
Tolhurst Machine Works.
William Sellers & Co., Inc.
Wood's, T. B., Sons Co.
TOILETS—
Vogel, Jos. A., Co.
TOOL CABINETS AND STANDS,
STEEL—
Lupton's, David, Sons Co.
TRANSMISSION MACHINERY—
Hyatt Roller Bearing Co.
TRANSMISSION SILENT CHAIN—
Link-Belt Co.
Morse Chain Co.
TRUCKS (MILL)—
Rogers Fibre Co.
TUBES, PAPER—
Sonoco Products Co.
TURBINES (STEAM)—
Allis-Chalmers Mfg. Co.
TWISTING MACHINERY—
Draper Corp.
Saco-Lowell Shops.
Whitin Machine Works.
TWISTING TAPES—
Barber Mfg. Co.
UNDERWEAR MACHINES—
Morrow Machine Co.
VENTILATING APPARATUS—
American Moistening Co.
Parks-Cramer Co.
VENTILATING FANS—
B. F. Perkins & Son, Inc.
WARPERS—
Cocker Machine & Foundry Co.
Crompton & Knowles Loom Works.
Draper Corp.
T. C. Entwistle Co.
WARP DRESSING—
Arnold, Hoffman & Co., Inc.
Bosson & Lane.
Drake Corp.
L. Sonneborn Sons, Inc.
Seydel-Thomas Co.
Wadsworth, Howland & Co., Inc.
WARP STOP MOTION—
Draper Corp.
Hopedale Mfg. Co.
R. I. Warp Stop Equipment Co.
WARP TYING MACHINERY—
Barber-Coleman Co.
WASHING POWDERS—
Nichols Mfg. Co.
WASHERS (FIBRE)—
Rogers Fibre Co.
WASTE BINS, STEEL—
Lupton's, David, Sons Co.
WASTE RECLAIMING MACHINERY—
Saco-Lowell Shops.
Whitin Machine Works.
WASTE PRESSES—
Economy Baler Co.
WATER INTAKE SCREENS—
Link-Belt Co.

WEIGHTING COMPOUNDS—
Arabol Mfg. Co.
Atlantic Dyestuff Co.
Bosson & Lane.
Marston, John P.
Metz, H. A.
Jacques, Wolf & Co.
Seydel-Thomas Co.
WATER WHEELS—
Allis-Chalmers Mfg. Co.
WELL DRILLING—
Sydnor Pump & Well Co.
WHIZZERS—
Tolhurst Machine Works.
WINDERS—
Saco-Lowell Shops.
Universal Winding Co.
WINDOWS—
Lupton's, David, Sons, Inc.
Carrier Engineering Corp.

Parks-Cramer Co.
Tolhurst Machine Works.
WINDOW GUARDS—
Cyclone Fence Co.
WINDOW FRAMES AND SASH,
STEEL—
Lupton's, David, Sons Co.
WIRE PARTITIONS—
Cyclone Fence Co.
YARNS—
Paulson, Linkroum & Co.
Mauney-Steele Co.
YARN TENSION DEVICE—
Eclipse Textile Devices, Inc.
YARN PRESSES—
Economy Baler Co.
YARN TESTING MACHINES—
H. L. Scott & Co.

Cocker Machine and Foundry Company

Gastonia, N. C.

BUILDERS OF TEXTILE MACHINERY

Linking Warpers, Linkers, Balling Warpers, Balling Attachments, Section Beam Warpers, Long Chain Beams, Short Chain Beams, Warp Splitting Machines, Warp Dyeing Machines, Warp Doublers and Splitters, Warp Coilers, Boiling Out Boxes and Warp Washing Machines, Dye House Ballers.

OUR SPINNING RINGS—SINGLE OR DOUBLE FLANGE

Start Easiest, Run Smoothest, Wear Longest!

PAWTUCKET SPINNING RING CO.

CENTRAL FALLS, R. I.

NORWOOD

Mechanical Filtration

Gravity or Pressure Types

Clean, Clear Water Guaranteed

Norwood Engineering Co.

Florence, Mass., U. S. A.

Chas. M. Setzer, Sou. Rep. Charlotte, N. C.

Ashworth Brothers, Inc.

Tempered and Side Ground Card Clothing

TOPS RECLOTHED

LICKLERINS REWOUND

COTTON MILL MACHINERY REPAIRED

For Prompt Service send your Top Flats to be reclothed and your Lickerins to be rewound to our nearest factory. We use our own special point hardened lickerin wire.

12 to 18 West Fourth St., Charlotte, N. C.

240 River Street, Greenville, S. C.

127 Central Avenue, Atlanta, Ga.

**MORE
SOUTHERN SPINNERS**

are using

"AMTEX"

**Spinning, Twisting and
Spooler Tapes**

Than ever before

This increasing demand indicates the superiority of AMTEX Tapes over all others.

We are pleased to build special Tapes for your particular needs.

Send us your specifications and we will guarantee satisfaction.

Manufactured by

**AMERICAN
TEXTILE BANDING CO., INC.**

GERMANTOWN, PHILADELPHIA, PA.

Sold in the South by

Charlotte Supply Co., Charlotte, N. C.



Why pay a high price for the latest and best type of machinery built and then handicap its output by belting it up with cheap belting? Why not pay just a little more and get the best? It is worth what you pay for it—and more. Production on your machinery counts.

Clean Quality

Trouble Free

Charlotte Leather Belting Company

Charlotte, North Carolina

VOGEL
PATENTED

Frost Proof Closets

Over 300,000 giving satisfaction. Save water; Require no pit; Simple in the extreme. The most durable water closet made. In service winter and summer.

Enameled roll flushing rim bowls.

Heavy brass valves.

Strong hardwood seat.

Heavy rivited tank.

Malleable seat castings will not break.

**SOLD BY JOBBERS
EVERYWHERE**

Joseph A. Vogel Co. Wilmington, Del.



Specify
"UCP" on your
Requisitions

These Products are the Reliable Standards of Uniformity Demanded by the Leading Textile Mills

Dyestuffs Softeners

Sizes

Oils

Chemicals

**UNITED CHEMICAL PRODUCTS
CORPORATION**

Importers, Exporters and Manufacturers

York & Colgate Sts.

Southern Office

Pawtucket, R. I.

**307 Commercial National
Bank Building**

Jersey City, N. J.

Charlotte, N. C.

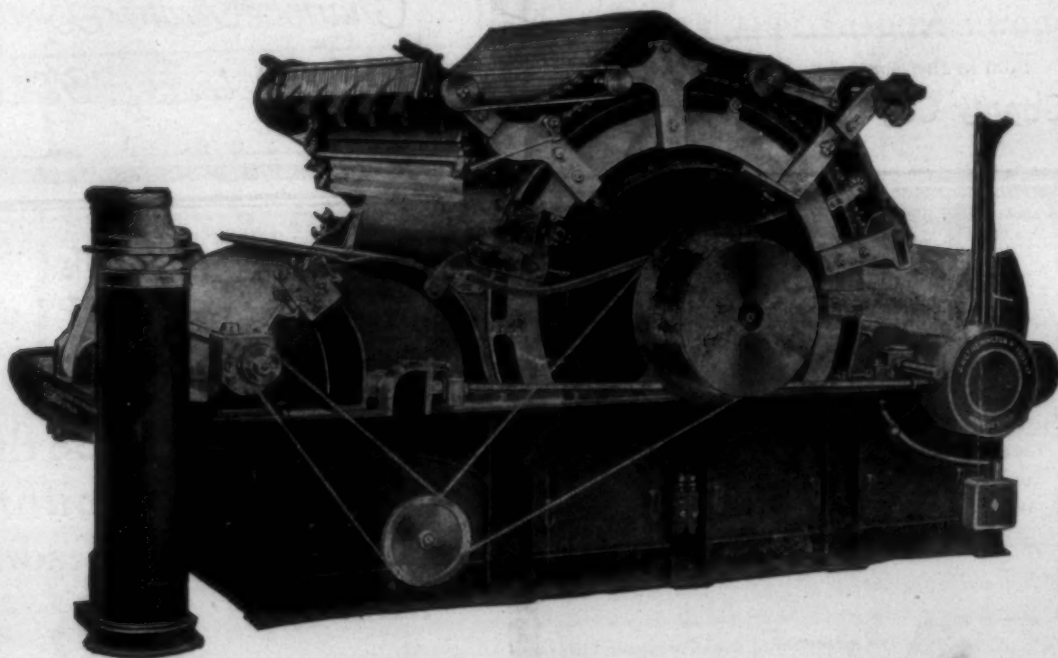
Norwalk, Conn.

Chicago, Ill.

JOHN HETHERINGTON & SONS LIMITED.

Manchester, England

*Makers of All Kinds of Machinery for
Opening, Preparing, Spinning
and Doubling. Cotton, Waste,
Wool and Worsted Yarns, &c.*



NEW PATENT CARDING ENGINE

COMPRISING MANY IMPROVED MOTIONS, Etc.

Sole Agent United States and Canada

HERBERT HARRISON

Room 867—49 Federal Street

Boston (9), Mass.

Large storehouse in Boston, containing very large supply of parts for Hetherington machines.
Permanent staff of experienced fitters for all kinds of repairs and resetting work on Hetherington and other machines.

CATALOGUES, INFORMATION AND ESTIMATES ON REQUEST